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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

THE PHYSIOLOGICAL ACTION OF HYDROCHLORATE OF COCAINE.*

BY LOUIS BAUER, M. D., F. R. C. S. ENGLAND,
Of St. Louis.

After reviewing the subject of cocaine in a general manner, the doctor reported the following case, which he thinks worthy of note, from the fact that the patient had, in a little less than seven months, consumed about 700 grains of cocaine, and at times in very large doses, the physiological action of which the doctor had opportunity to carefully examine.

The patient descends from a confirmed drunkard; he himself found whisky of alluring taste, as early as his thirteenth year; at twenty-five it was indispensable to his comfort and happiness; with a few intermissions of varied duration, he has been the slave of alcoholic abuse up to the beginning of January last.

On the 9th of that month he had freely imbibed the "indispensable beverage." The last draught of ardent liquor consisted in a pint of gin. He had then just enough to submit to a hypodermic injection of cocaine, under the promise that it would relieve him of a rousing headache, and probably quench his appetite for "fire-water" forever. Unfortunately the physician disclosed the name of the remedy, which enabled the patient to procure it for himself and apply the same on his own responsibility. Thenceforward he used the cocaine by the hypodermic injections, increasing the doses from the one-fifth part of a grain to ten grains at a time, and very soon he found himself in a condition that demanded its continuous use.

Small doses of 5 to 10 drops of a 5 per cent. solution produced very mild effects, sufficiently marked, however, to be fully realized by the patient. With the increasing doses frequently repeated, the action of the cocaine became much intensified, and the reaction was most depressing and disturbing to the patient; as in alcoholism, large doses were required to bridge over the horrible sensations which followed the antecedent application.

In enumerating the physiological effects of large doses of cocaine, I should here state:

1. That none of the injections cause any local inconvenience, either irritation, inflammation of the skin, or abscess. From numerous insertions of the cannula on the side and in front of his abdomen, not the slightest mark remained; even recent insertions could hardly be traced.

2. A small zone of the integument, of which the punctured wound was the centre, showed a noticeable reduction of sensibility.

3. The action of the cocaine invariably ensues within 15 to 25 seconds; in less than half an hour it is at its height; and within two hours it has almost entirely disappeared, when reaction gradually follows.

4. The cocaine obviously exercises its first effect upon the heart; the pulse, ordinarily from 70 to 80 per minute, rises quickly to more than 120, but scarcely ever exceeds 130; it remains regular, and shows no intermissions; it is of medium size, slightly hard, and continues in that condition and

*Abstract of paper read before the Mississippi Valley Medical Society.

that quality for the first two hours following the application, when it gradually diminishes in frequency, and returns to the ordinary standard. The patient insisted that intermissions had been frequently experienced by him, and that on locomotion the frequency would greatly augment. I was, however, unable to affirm these observations.

5. Among the earliest disagreeable symptoms was a burning sensation of the trunk, and a cold and clammy perspiration of the extremities; the thermometer did not, however, reveal any tangible increase of animal heat, whereas the condition of the extremities was pronounced. The temperature of both the mouth and the axillary cavity showed rather a decrease, not exceeding one degree.

6. When the cocaine is in action, the skin appears dry and pallid, but the patient avers that a profuse and clammy perspiration would ensue as soon as he assumed a recumbent position; in the latter, the respiration becomes laborious, deep, sighing and yawning.

7. Whilst the moisture of the oral cavity remains undisturbed, the patient complains of a sensation of dryness and difficult deglutition; at one time the movements of the pharyngeal muscles were as painful as in inflammation of the tonsils, but a new injection of cocaine removed the symptoms promptly.

8. Whilst under the influence, the patient is devoid of thirst, and would rather object to drinking any liquid, on account of the disagreeable sensation it invariably produces.

9. Cocaine destroys the appetite completely during its action, and gives rise to aversion for food, but the appetite returns when the effects have passed off.

10. It induces constipation, or intensifies the preëxisting sluggish condition of the bowels; the latter may continue for a week and longer, and may require repeated large doses of drastic medicines, whereas in his ordinary condition, a Seidlitz powder would answer to move the bowels. At one time four cathartic pills induced diarrhœa with painful tenesmus. A new dose of cocaine promptly subdued both.

11. The secretion of urine ceases almost entirely for the time being, but returns when the patient comes out of its influence.

12. The sexual functions are likewise suspended to complete impotency during the action of cocaine; their vigor returns, however, with rather increased appetite and endurance.

13. The senses manifest exaggerated susceptibilities; the patient experiences a ringing in the ears as from quinine; when large doses have been employed, sounds become intensified, as in hydrophobia, without being painful, as in inflammations of the middle ear. Light affects the optic nerves to a degree of intolerance; illusions happen, distorting objects, even hallucinations occur, without fear or apprehension; the skin assumes a degree of sensibility, so as to perceive an ordinary draught of air with the force of a blowing storm. These phenomena relating to the senses are, however, exceptional, and only happen under the action of very large doses.

A common effect upon the eye-balls is their prominence and brilliancy, connected with the dilatation of both pupils; more so, however, in the left. This effect develops very gradually, appearing towards the end of the action, but extends into the intermissions of succeeding doses.

14. Large doses of cocaine give rise to loquacity, notwithstanding that the patient avers difficulty of speech, for reasons already mentioned; his conversation is, however, clear, connected and congruous with the subject concerned. Most remarkable is the good memory, the remembrance of dates, names, and events. I have observed no aberration of the mind at all; it seems to me that the intellectual operations are in no way interfered with.

15. A few times, whilst the patient was under the excessive influence of cocaine, he complained about severe pains in his limbs, "electric shocks," as he expressed it, along the brachial plexus, sciatic and crural nerves, although they seemed not to interfere with active and rapid locomotion. They were, however, increased by touch. For the last fortnight these symptoms have not recurred.

16. Most remarkable is the decided aversion for alcoholic liquors observed ever since the patient commenced to use cocaine in large and excessive doses.

These are the phenomena elicited by my repeated observations on the patient within a month's time.

The patient is æt. 38, is above middle size, very active, and moves with vigor and endurance; nevertheless he looks pale and haggard, and has lost nearly twenty pounds of his weight, which reduction, however, he will not attribute alone to the action of cocaine, but partially to the alcohol. The question naturally arises, to what extent his constitution has been damaged by the excess of cocaine. During the last three years and six months I have frequently met the patient, and comparing his former condition with the present, I cannot say that he has notably changed in

either appearance or action. The cocaine habit is certainly most deplorable for a man of his intellect and social station of life, but it appears to me that the use of cocaine has injured him less than excessive alcoholism would have done by this time, had it been continued. The doctor observed none of those organic disturbances in the system which are so prominent from the abuse of ardent liquors. By comparison, therefore, the former is preferable to the latter.

TONSILLITIS.

BY JAMES E. FREE, M. D.,

Of Emporium, Pa.

Cynanche tonsillaris, or tonsillitis, is an inflammation of the tonsils; it is a common complaint among all classes, and its frequency and comparative freedom from danger to life are the reasons why it is so much neglected by a majority of practitioners. Knowledge is our badge of honor. *In hoc signo vincit.* The truth of the Roman emperor's illustrious motto finds humble confirmation in the history of such an insignificant complaint as tonsillitis, for by knowing how to manage the disease it is often possible to prevent a great deal of suffering. But as the habit of depending upon books is increasing with their supply, there are some men who will go down to their graves in peaceful ignorance of the wisdom to be gathered outside the covers of their favorite authors. Sooner or later the habit of consulting the library for every symptom will bring its reward. In the nature of things, books must often fail to approximate the truth, owing to the fact that only typical cases can be described.

Quinsy is the common name for tonsillitis, and quinsy it will be to the end of the chapter. It is caused in a variety of ways. Usually exposure to cold and dampness is blamed for the morbid manifestation, but legion is the mame of the conditions, climatic, telluric, terrestrial, etc., which from time to time league themselves together against the human being who exposes himself, with a predisposition to quinsy. Especially *chronic tonsillitis* is due to scrofulosis and kindred diatheses, and by the way an enlarged tonsil is liable to cause so much trouble that the use of Fahnestock's guillotine is always advisable. A distressing cough, difficulty of speech, pain in the throat, difficulty of deglutition, and a host of other symptoms, disappear like the mist of the morning at sunrise, when this simple procedure is resorted to. The same thing can be said of amputating the *uvula*. Cases of supposed consumption are said to have been cured by resorting to this expedient.

Quinsy has been mistaken for diphtheria. We find that statement in one of our standard text-books, and we know that it is true. It always causes a thrill of pleasure to stumble upon a passage in a great author, which shows to the young physician that his blunders as well as his triumphs, have been anticipated, by those who wear the laurels of hard-earned fame.

One of our first cases, after starting on the thorny road to professional distinction, was of this uncertain character. We do not suppose that our bearded contemporaries would have made such an outrageous mistake, but the little whitish spots of the increased secretions looked very much to our imagination like the patches of pseudo-membrane in this king of terrors: that it was a genuine case of mistaken identity, two trips in the saddle (something to which we were unaccustomed) at the witching hour of night when graveyards yawn, with the thermometer 20° F. below zero, will attest. But the unsuspecting parents of the child paid the bill without murmuring, and so the sting was partially removed from the mortification which set in as the disease progressed. "Of all sad words of tongue or pen, the saddest are these—it might have been"—paid for.

The first symptom of quinsy is dryness of the the throat, the patient being irresistibly impelled to swallow saliva to keep the throat moist. Headache is also a symptom in the prodromal stage, likewise a feeling of malaise, and dull aching pains in the limbs and other parts of the body. A positive chill often ushers in an attack of quinsy. Last winter a patient offered to bet us that he had the mumps; we staked an old account of ten dollars, and won on quinsy, but the obstinate old rascal refused to surrender his convictions until a violent fit of coughing brought up about a half-pint of pus. Qualms of conscience which are said to be common in cases where one man takes an unfair advantage of a fellow being were mitigated in this instance by the fact that the patient refuses to pay his honest debts.

The lymphatics are swollen and tender, and one or both sides of the neck may become enormously enlarged, at the same time that the tonsils and all the structures internally participate in the inflammatory process.

So close do the opposite surfaces on the inside approach sometimes that suffocation is imminent, and we have actually known a well regulated surgeon who contemplated that heroic operation, tracheotomy.

To add insult to injury, as it were, a thick, glairy, tenacious mucus is poured out, which sticks closer than a brother, and keeps the patient worrying and spitting. There is also often a discharge from the naso-mucous membrane, and under such circumstances a human being with a swelled neck in one hand and a handkerchief in the other is in a manner justifiable for assuming the looks and character of a fiend. We speak forth the words of truth and soberness, as St. Paul said in his memorable defence before King Agrippa. Some physicians in these later days do not always do so, be it said with shame, and to them especially and all others within reach, we say that we sincerely hope they may never be compelled to cultivate those habits of patient endurance and uncomplaining suffering, which they are accustomed to inculcate in quinsy patients.

Fever is a necessary concomitant of quinsy. The temperature often exceeds 102°, and sometimes goes up to 104° or 105°. When it reaches this extraordinary height, delirium may supervene, but it is not of long duration or serious import. The tongue does not become inflamed, at least so far as our experience goes, but all the other soft structures in the throat and mouth become involved at times. The tongue is thickly coated with a creamy yellowish fur, which is an indication that the bowels need attention. Generally the skin is moist and hyperæmic, and the urine contains the normal amounts of urea, chlorides and albumen.

The treatment should be commenced with a dose of calomel and ipecac, followed by a saline draught, unless free catharsis supervene soon. Then a prescription something like the following acts admirably:

℞. Potass. iodid.,
Potass. nitrat., āā ℥iij.
Ant. tart., gr. ij.
Aqua,
Syrup prun. virq., āā q. s. ad f℥iij.
M. Sig.—℥j every hour.

Its administration should be continued to the extent of producing the well-known therapeutic effect of the iodides; namely, violent frontal headache and coryza. At this point it should be suspended until its unpleasant effects subside, and afterward a reduced dose be given; enough to make a perceptible impression is what is required. Bromide of potash, tr. ferri murias, and ant. et pot. tart. in combination, make an excellent remedy.

The prescription given below is often reliable, on account of the aconite it contains probably, which latter drug according to some authorities is a specific:

℞. Potass. chloras,
Potass. nitras, āā ℥ij.
Vini. antimonii,
Tinct. opii camph., āā f.℥j.
Tinct. aconite rad., f.℥j.
Syrup q. s., f.℥iv.
M. Sig.—One drachm every two hours.

Poultices, fomentations, rubefacients, may be of service, but it is necessary to produce a profound impression upon the system before the onward march of the disease can be arrested. Tincture of guaiac is much recommended by some practitioners. The part the medicines spoken of play in controlling the inflammatory process is not entirely clear, but that they and all drugs with allied properties are capable of doing such work, thousands of men are willing to testify.

The fever and pain are two symptoms which often require special treatment. Almost any of the ordinary febrifuges may suit the case, with the addition of morphia, or some preparation from the list of anodynes for the pain.

In spite of the best treatment, quinsy sometimes proceeds to the formation of pus, and then relief must be sought by furnishing an outlet. There are two ways of accomplishing this result: with the knife, or by allowing nature to run its course. Which of these is the better plan, depends upon the attendant to decide.

A CASE OF POISONING BY HYOSCYAMIN TREATED BY MORPHIA HYPODERMATICALLY.*

BY ROBERT COLTMAN, M. D.,
Of Jenkintown, Pa.

On the evening of June 27th, 1885, about seven o'clock, a gentleman of high culture, and well versed in chemistry, pharmacy, also in general science, came to my office in a high state of nervous excitement, and told me he had taken about $\frac{1}{60}$ of a grain of hyoscyamin by the hypodermic syringe, a half hour previous to his coming to see me, and just before he came he had taken a grain of morphia by the mouth. Upon examination, I found the pupils dilated to their fullest extent; pulse 155 and very feeble; respiration rapid and shallow; conjunctiva glazed and dry; articulation impaired, and the patient unable to walk without staggering and almost falling. His mind wandered and he showed a great disposition to sleep. Upon being aroused from his naps, it took him a few minutes to recover his thoughts. He had been addicted to the morphia habit for

*Read before the Adjunct Montgomery Co., Pa., Medical Society.

several years, and had but recently succeeded in giving up the drug.

I immediately gave him ¼ of a grain of morphia hypodermatically, which affected the pulse and respiration to a perceptible extent in three minutes. As I kept him on my veranda in order to have plenty of fresh air, I could not use my watch to record the pulse, but found that both velocity and volume increased rapidly, while respiration slowed and declined.

The patient remained with me until 10:30 p. m., when he left very much improved and free from danger. A good night's rest completed the cure. The next day he reported that he took over one grain of hyoscyamin by the mouth, not by the syringe, and did not take any morphia. This was the correct statement, as he did not fully comprehend what he said when he first came to me. He had no design in misrepresenting the case, as he was fully aware that I knew of his opium proclivities, having been his medical attendant for five years, and having treated him in several severe illnesses. This case shows the power of a small quantity of morphia, used by the hypodermic method, to antagonize hyoscyamin without emesis.

Hospital Reports.

NOTES FROM THE PHILADELPHIA HOSPITAL.

SERVICE OF PROFESSOR PARVIN.

Artificial Nipples.

An argument against the use of artificial nipples, from an æsthetic standpoint, is advanced by Dr. Parvin. Supposing, as claimed by some evolutionists, that the infant receives its first impressions and ideas of the beautiful in nature from its familiarity with the wavy outlines and beautiful contour of its mother's breast, with which its little face and hands are so constantly in contact in the act of nursing, we can conceive how the artificial substitute of a rubber shield or the nipple of a nursing-bottle would fail to convey these impressions, The professor thinks there is food for thought in this suggestion.

Depressed Nipple—Corsets.

A woman was shown whose nipple was so depressed that her infant was unable to grasp it. This condition depends upon shortening of the galactiferous ducts, or upon excessive action of the muscles of these ducts. When once established, very little can be done to remedy this deformity. The pregnant woman should be instructed, when four months gone, to daily draw and coax the nipple out, so that by the end of pregnancy she will have a bold, prominent nipple for the child to grasp. This may seem like a trivial matter, but we should realize that the condition of the mother's nipple exerts a most wonderful influence upon the happiness or misery of both mother and child, and through them upon all connected with them. Some are wont to attribute depressed nipples to the use of corsets, but Dr. P. does not believe that the corset, as made to-day, has much to do with it; besides, there is no use in fighting corsets—you will only be called "cranky," and will accomplish nothing, because women *will* wear them, no matter how much you may preach against them. To draw out the nipple the finger and thumb may be used, or we may resort to a wide-mouthed vial of three or four ounces in size. Fill with hot water, empty out, and when warm fit accurately over the nipple; as the air cools it contracts, and so exerts a suction force on the nipple. Some men claim that this performance reacts injuriously on the pregnancy; this fear Dr. P. considers more imaginary than real. It should be practiced for about ten minutes, morning and evening.

Milk Secretion in a Baby.

Enlarged breasts and the escape of milk on pressure is not so very uncommon; in fact, it is so common that one is almost inclined to believe it the rule. While more common in female infants, yet it occurs in males, which lends some weight to Darwin's theory, that in our original state both sexes were accustomed to give suck to the young. Aristotle says that nature has done nothing in vain, but Dr. P. fails to find a satisfactory reason for the existence of milk in the infant's breast. It will usually disappear in a week, but it may last longer. If we take it away, we invite the secretion to increase. Much pressure may cause mammitis, or mastitis, or even an abscess. Mothers will become anxious over this condition, and some will resort to the superstitious proceeding of donning the father's shirt and wearing it until the milk disappears. A good rule is to do nothing—not more than to anoint the breast with a little sweet oil and spirits of camphor.

Icterus Neonatorum.

The Professor exhibited a jaundiced baby. The whole body is yellow, the deposit being noted in the sclerotic even. This condition will alarm a mother. In this case the baby was very red for the first two or three days, then white, and the jaundice came on after two days.

There are two forms of infantile jaundice; the ons simple (not icteroid), occurring in children who have passed through severe labors, where some of the capillaries having been ruptured, blood is effused, which undergoing certain changes presents to the skin a jaundiced appearance. This form requires but little treatment, and maybe a dose of castor oil or bicarbonate of soda (gr. i–ij.) and tinct. nux vomica (gtt. ¼) thrice daily.

In grave forms there is sometimes associated septicæmia, especially when the mother has some septic infection. There is sometimes umbilical phlebitis or arteritis, and here the prognosis is very grave; the child will generally die, no matter what yon do.

SERVICE OF DR. M. D. MUSSER.

Lacerated Perineum—Procidentia Uteri.

This woman has had two operations performed, which were partially successful. One was the Alexandrian operation of shortening the round

ligaments in the groin. We must remember that the round ligaments are not the only supports that the womb has, for it has many others. When the perineum is ruptured, in spite of all the other supports, there is a strong tendency to procidentia. We must remember that the position of the uterus is not a fixed one, it changes with every motion of the body, with respiration, etc., but it must hold its relative position to the other organs, or we will have pathological conditions.

Unless a lacerated perineum is at once sewed up, it removes a great support from the uterus; hence procidentia most frequently occurs in poor women, who cannot afford the time to properly care for themselves after labor. In this case there is also a varicocele, and the urine retained in the pouch-like bladder undergoing decomposition and acting as an irritant, has set up cystitis.

In this case, Dr. Musser restored the perineum by the usual operation, and gave the following points of preparation and after-treatment:

A purgative is given twenty-four hours before the operation, and an enema immediately precedes it. The night before one grain of opium is ordered to prevent the gurgling from the intestines into the rectum. After the operation, the parts are kept quiet for a week or ten days, and liquid diet, leaving but little residue, such as milk, beef tea, and animal broths, are adhered to. The sutures are removed on the seventh day, and on the eighth or ninth a dessertspoonful of castor oil is given. If there are hard masses of fæces, enemas are used, or they are broken up with the finger. The bowels are thus confined for four or five days; regular motions not being allowed for two or three weeks. The water is drawn four or five times daily. Baker Brown divides the sphincter ani, but Dr. M. thinks this hardly necessary; if we use both deep and superficial sutures and properly apply adhesive plaster, the tension of the sphincter will be sufficiently antagonized. An important point is to introduce the first suture at least three-fourths of an inch below the denuded surface, thus drawing up the tissue like the mouth of a purse. There is very rarely hemorrhage sufficient to call for ligatures, but if there is, we should not use astringents; cold or very hot water, air and accurate coaptation of the parts, will usually suffice to check all hemorrhage. When it is obstinate, we may put a pledget in the vagina, but must be careful not to stretch the sutures.

Even when a good pelvic floor has been made, there is danger that a heavy uterus may break it down; hence we need some artificial support, until antiphlogistic treatment has reduced the size and weight of the uterus. For this purpose Dr. M. recommends the cup-shaped pessary with band around the abdomen.

A great practical point in this operation is to denude a sufficiently large surface, and to be careful to remove the mucous membrane in the angle of the space; we are much more likely to denude too little than too much.

SERVICE OF DR. E. T. BRUEN.

Idiopathic Pyelitis.

This patient presents some condition of seriously depressed vitality; he is thin, his eyes sunken, etc. he has been subject to irregularities of temperature, to flushes and occasional chills and sweats, for three months before admission to the hospital. These symptoms lead one to look for some centre of suppuration. The urine shows a whitish deposit, which on microscopic examination proves to be pus. Such symptoms would raise the suspicion of pyelitis. When pus originates in the pelvis of the kidney, it is apt to be thoroughly mixed with the urine, which is usually acid in reaction. The microscope here reveals nearly a pure pus, not mixed with epithelial cells. In recent cases the pus cells are normal and ordinary in appearance, while in older cases of pyelitis they are altered, which is an important point in prognosis. When we have casts and renal epithelium, we ought to suspect some disease of the kidney itself. When the pus comes from the bladder it is usually mixed with mucus and epithelial cells from the bladder. In cystitis also, the urine is generally alkaline in reaction, produced by a volatile alkali, ammonia, developed in the bladder by fermentation of urine, due to bacterial organisms or to the formation of a ferment in the bladder; the urine is passed frequently, and its passage is painful; there is tenesmus, which is absent in pyelitis, so that it is not so difficult to make the distinction. Pyelitis may be caused by the extension of an inflammation from the bladder or the prostate to the pelvis of the kidney, or it may be due to mechanical irritation, as from the presence of a stone; the first is the most common cause in women. These calculi are usually of the uric or oxalic acid variety. This patient has complained so much of lumbar pain, as to raise the suspicion of an hepatic abscess pointing in the lumbar region.

This has, however, been now eliminated, because the liver has been found to be normal, while rest and treatment directed to pyelitis has removed the pain. In renal calculi the pain is also very severe, and there is apt to be blood in the urine, caused by spiculæ of the stone injuring the vessels; there is none here, hence he dismisses stone. This condition may occur in connection with blood-poisoning, as in fevers; there is none here. It may occur from the pressure of a tumor; none here. Dr. B. is forced to conclude that it is a case of *idiopathic pyelitis*, due maybe to cold, but he is reluctant so to account for it. There is no history of injury. Treatment must be unsatisfactory, as we cannot affect this portion of the body save through the general system. These cases are very obstinate, and are apt to run on to irritation of and surgical kidney, and ultimately to unfavorable results from hectic, etc., brought about by retention of urine from thickening of the pelvis. When amenable to treatment, the milk diet is of service. The urine should be rendered alkaline, for which we may use carbonate of lithia, bicarbonate of potash, and phosphate of soda, given freely diluted with water. If we succeed in making the urine neutral it will answer. You should give a stimulating diuretic, as oleo-resin of cubebs. No specific treatment can be indicated, he can only lay out the general line. Boracic acid has a healing effect on mucous membranes, and this may be combined with bromide of potash if there is much pain. Bromide of potash may be made into an emulsion with oleo-resin of cubebs. Basham's

mixture is called for. The treatment may be varied, bearing always in mind to keep the urine neutral. Bear in mind as a possible complication peri-nephritic abscess; look for œdema of loins and localized pain; they form slowly, and are latent.

Rheumatism.

Rheumatism, Dr. B. believes, is rather more of a nervous than a blood disease, in evidence of which he adduces the suddenness of its onset and cure, metastasis, and its affecting the joints rather than the general system. The illustrative case before the class was cured in five days by remedies directed to the nervous system. Fevers having a neurosal origin are relieved promptly by salicylic acid acting on the nervous system. The alkaline base corrects the faulty condition of the blood due to faulty elimination, due in turn to the nervous system. His prescription is:

℞. Acid salicyl.,	℥j.
Ammon. carb.,	gr. l.
Syr. and aquæ,	f. ℥ij,

M. S.—Give in course of 24 hours.

Larger doses of the acid will have a tendency to weaken the patient and produce deafness, but the carbonate of ammonia will remove this tendency. The dose may be increased to forty grains, but we should never go beyond this, and the ammonia should be correspondingly increased.

Oil of gaultheria in similar cases has produced the same results. It may be given in doses of twenty drops every two hours for thirty-six hours, and then ten drops every twenty four hours. He also uses alkalies with the salicylic acid; bicarbonate or citrate of potash in water as a lemonade may be used freely until the urine becomes alkaline, when it should be exhibited in doses sufficient to preserve this alkalinity. The alkalis are stopped as soon as possible, and the tone of the blood improved with tincture of the chloride of iron. The diet should be such as not to supply albuminoids in too great quantity. Beef-tea, eggs, milk, oat-meal, etc., should be interdicted.

SERVICE OF DR. J. B. WALKER.

The Physiognomy of Disease.

Just as we are able to recognize the features of our intimate friend and call him by name before he makes his identity known to us, so with the outward features of disease; there is a physiognomy, a feature or external expression of internal disease that is more or less characteristic. But, just as we find it difficult to so accurately describe the features of a friend to a third party that he can recognize him, so is it with the description of this physiognomy of disease. But let the third person once see our friend, and he will thereafter recognize him; so it is with disease.

Physiognomy of Malarial Fevers.

When a patient is pale and anæmic, the mucous surfaces pallid, conjunctiva pale, tongue pale, lips blanched and but slightly colored, we may suspect some malarial cachexia. In this connection, Dr. Walker makes a strong argument for the use of capsicum in malarial fevers; he thinks it is not ordered nearly enough. It seems to aid and increase the power of quinine and prevents it from deranging the stomach.

℞. Quiniæ sulph.,	gr c.
Oleo resin. capsici.,	gr xii..

M. and div. in pil. No. l.

S.—Two pills every four hours.

Physiognomy of Bright's Disease.

In this disease, while there is no absolute certainty in the appearances presented in the face, yet the physiognomy is sufficiently characteristic to cause us to suspect the disease when certain peculiarities are observed. When, while there may not be marked oedema, there is yet sufficient puffiness of the face to cloud or displace the ordinary lines; when the blood vessels are distended, showing us red lines in the cheeks and nose, when there is sagging of the cheeks, a fullness of the jowls, and a peculiar earthy, pearly pallor, we have reason to look for Bright's disease. There is often noted a peculiarity of gait, consisting of a difficulty in keeping the equilibrium, due, most likely, to the influence on the brain of an imperfectly depurated blood, owing to the faulty action of the kidney.

From a distance, the face may sometimes present a ruddy hue, but closer examination will demonstrate this to be due to dilated blood-vessels and ecchymotic spots. The superficial arteries and veins of the head and neck are tortuous and dilated, being sometimes visible from a distance. The arcus senilis is another evidence often found. Atheroma of arteries and arcus senilis are surface indications of granular nephritis. But such appearances may be present when there is no Bright's disease, as, for example, the result of syphilitic infection or chronic alcoholism. Œdema (general) or ascites rarely occur in a marked form in granular or interstitial nephritis, but it may occur when this form of the disease is complicated with an attack of *catarrhal* nephritis, to which form dropsy peculiarly belongs; it may also occur in the waxy form, but is not so common there.

Physiognomy of Carcinoma.

Dr. W. calls especial attention to a peculiar glistening sheen of the surface (not unlike moonlight on the water) as very characteristic of carcinoma. It is not always present, but when it is observed it is a very strong sign; indeed Dr. W. has only seen it once where the autopsy has failed to reveal cancer, and in that case he is not certain that the disease may not have existed in some portion of the body not examined. The illustrative case had an expression of suffering, while the skin was much jaundiced. This glistening sheen is scale-like, so to speak; not scales that you can scrape off, but the glistening surface is marked by lines that do not glisten. It is most frequently present on the surface of the abdomen.

Physiognomy of Typhoid Fever.

There is flushing of the cheeks (no sordes in the illustrative case, because the nursing is good); apathy is marked, so much so that flies walk unnoticed over the face; the eyes are half-closed, the mouth open, and he breathes through it.

This being a typical case of typhoid, Dr. W. made a few remarks on the disease. When the morning temperature is below 102° and the evening temperature not above 104°, it is a satisfactory condition. While the eruption may occur in tubercular lesions, yet it does so so rarely that

they may be considered characteristic of typhoid. They are circumscribed, elevated, and rosy; rarely punctate, but occasionally become vesicular. They will disappear on pressure and after death. They generally appear on the trunk, but rarely on the extremities, though he has seen them on the hands. In order to be sure about the disappearance on pressure, we should place a finger on either side and stretch the vessel, for if we simply press on the spot and remove the pressure, the pressed-out blood will flow back so rapidly that we cannot be sure whether it has disappeared or not.

SERVICE OF DR. J. F. HEARN.

Stricture and Cystitis.

This patient makes water every fifteen minutes; just at the end of the act he has severe pain, which, commencing at the neck of the bladder, passes down to the head of the penis; he has to strain hard to pass the last drops. Sometimes the stream shuts off suddenly, like turning off a spigot, and he is compelled to twist, turn, and strain to start it going again. These symptoms indicate an irritation at the neck of the bladder. They would also suggest stone in the bladder, but examination fails to reveal any. This trouble came on after gonorrhœa, as it does in nine cases out of ten. Dr. H. succeeded in passing a No. 21 catheter (French scale), and for the cystitis he orders an injection of

℞. Acid. carbol., ♏ij.
Aquæ, f. ℥ iv. M.

When the stricture is cured (by dilatation), this injection (nitrate of silver may be substituted for it) will cure the cystitis. Dr. H. lays great stress on the use of *clean* instruments; by neglect of this precaution we may produce cystitis. He always precedes the passage of an instrument by injecting a syringeful of sweet oil into the urethra. In sensitive urethras an injection of a four per cent. solution of cocaine may be used. We are cautioned against what Dr. H. calls *surgical mania*, which consists in a determination to reach the bladder at all hazards. If he cannot pass the stricture easily, he puts it off to another time, as we may do incalculable harm by using undue force.

Gonorrhœal Ophthalmia.

This man went to bed with his eyes all right, and woke up at five o'clock in the morning with pus running down his cheeks, so virulent is this poison. It was not stated how it came into contact with his eyes. Operative interference will here be required. Since adhesions of the iris are inevitable in such cases, we should at once resort to instillations of atropia (gr. ij.–iv. to f. ℥j.), in order that the pupil may be dilated before the adhesions occur, and some vision thus secured. Solutions of nitrate of silver (gr. xl.–l., or even lxxx. to f. ℥j.) should be used in the eyes, while constitutionally depressant treatment, as magnesia and tartar emetic, is indicated. Leeches should be applied to the temples. Boracic acid (gr. iii. to f. ℥j.), or corrosive sublimate (gr. ¼ to f. ℥j.), with a little lime water, may be used as a wash.

Stricture.

When, as in this case, there is a stricture near the meatus, you may be sure there is also a stricture further back. If the stricture is tight, and you are going to use a filiform bougie, do so at first. If you first use a large instrument, you will so pouch the urethra that the filiforms will catch and will not pass. If you have used a large sound first, without success, wait a few days until the urethra has assumed its usual condition before you try the filiforms. The stricture near the meatus he cut on a grooved director with a probe-pointed bistoury. If, in a given case, where there is developed an inability to pass urine, you can introduce a filiform bougie and give a dose of opium, the patient will pass his water. He is able to dilate the divided anterior stricture with a No. 23 (French) sound; but cannot even pass a filiform through the sound stricture. He therefore will let it alone for a few days.

MEDICAL SOCIETIES.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

(*Continued from page* 348.)

Dr. Goodell exhibited his improved

Uterine Dilator.

He said that the main difficulty in the operation for the rapid dilatation of the cervical canal lay in the liability of the blades of the instrument to slip out. This he had, in a great measure, overcome by having shallow grooves cut into them. Into these grooves the tissues sank, and the resulting friction kept the instrument in place.

Since he had called the attention of the Society to his instrument, not quite a year ago, he had performed the operation forty-one times for dysmenorrhœa and sterility, making in all two hundred and nine such cases. In not a single instance had dangerous symptoms followed, and the average of success was a very large one. He had become firmly convinced that for dysmenorrhœa and sterility, the operation of rapid dilatation of the cervical canal would, except in some very rare cases of stenosis of the os externum, wholly supersede the cutting operation, the use of tents, or the slow dilatation by any means whatever. For by the former not only was the measure of success far greater, but the danger from inflammation was very much less. He dilated the parts from three-quarters of an inch to one inch and a quarter, as measured off by the register in the handles, watching the cervix carefully to see what strain it could bear. His instrument could be opened to the width of one and a half inches, but he resorted to that extreme divergence only when wishing to introduce his finger for diagnostic purposes. This he could not ordinarily do, unless the parts were relaxed from hemorrhage. Usually, however, when suspecting the existence of a polypus, he did not find it needful to pass in his finger, for after a moderate dilatation he introduced a fenestrated forceps and opened it at hap-hazard. In this manner he has repeatedly caught and twisted off a polypus without knowing it was present, the subsequent removal of the growth through the os uteri being the most difficult part of the operation.

Dr. Baer was strongly impressed by the case of a lady whom he had delivered to-day as to the advisability of entirely giving up division of the cervix. A year and a half ago he had slit up the cervix posteriorly, and to-day he felt very anxious during the first stage of labor as to the probability of laceration of the uterus, starting from the seat of the former operation. The anterior lip was very long coming down under the pubis, and the posterior lip could not be felt. The case will be reported fully.

When the uterus contains a polypus, the continued hemorrhages reduce the contractility, and a single dilatation will sometimes enlarge the os sufficiently to admit the finger or forceps; but, if the uterus is healthy, it contracts immediately after the withdrawal of the dilator. He could not recall an instance of inflammation following rapid dilatation. Sterility of long standing is seldom cured by dilatation or any other means.

Dr. C. M. Wilson had seen recently in the practice of Dr. Ellwood Wilson a uterus, the cervix of which had been divided bilaterally some years ago. The operation had resulted in the development of the symptom peculiar to a bad laceration of the cervix with ectropion. Trachelorraphy was performed by Dr. Agnew, with complete relief to the patient. Dr. Wilson mentioned this case to call attention to the change in opinion and practice since Emmett proposed his operation.

Dr. Longaker inquired as to the prevention of slipping of the dilator, and called attention to the original method of pressure over the fundus of the uterus.

Dr. J. G. Allen has performed rapid dilatation over seventy-five times, and has never seen any bad results from the operation. The blades of his instrument diverge as they separate, and there is then no disposition to slip out. The blades are more curved than in Dr. Goodell's instrument; he thinks that an advantage in holding the instrument in place. The handles are turned up so as not to touch the bed or table.

Dr. Goodell prefers the slight curve, so that in flexion of the uterus he can introduce the dilator with its curve reversed to the bend in the womb, and by opening the dilator in that position rectify the flexion of the organ. He prefers parallelism of the blades, because the stenosis of the cervix is greatest at the external os, and there is no need for dilatation above the internal os. He considers it dangerous to press the fundus of the uterus down while using the dilator for fear of wounding or even penetrating the tissues, and he uses a strong tenaculum to hold the organ; but since he had got Mr. Gemrig to roughen the blades by grooves, he had not been annoyed by the slipping of the instrument. He rarely finds it necessary to separate the blades more than one inch, but he sometimes does so to the extent of one and a half inches, especially when he wishes to introduce his finger into the uterine cavity.

Dr. Goodell exhibited two specimens of

Parovarian Cysts.

In each case the cyst was so detached from the ovary that the former could have been taken away without injury to the ovary. He was greatly tempted to practice conservative surgery in these cases and leave the ovaries untouched; but on account of apparently incipient cystic degeneration, they also were included in the ligature and removed. Both these cases were operated on in his private hospital, and both had recovered.

In his experience, the removal of parovarian or of broad-ligament cysts was one of the most successful of operations. Out of a large number which he had performed, he could recall but a single fatal case, and in that the result seemed hardly due to the operation. The lady lived in a distant city and he did not see her after the operation, which was a very easy one. At the end of a week the bowels were moved, the stitches removed, and everything gave promise of an unusually prompt convalescence. On the twelfth day, however, she was seized with uncontrollable vomiting, and she died on the seventeenth day. Six months previously, she had an analogous attack of vomiting, from which she barely escaped with her life. Thus far this year he had had eighteen ovariotomies, and this was the only fatal case among them.

Dr. Montgomery wished to ascertain the opinion of the Society as to the advisability of removing the second ovary, when in an operation for the removal of an ovarian cyst the other ovary was found to be slightly diseased. In his first ovariotomy, performed in 1879, the second ovary was found to contain numerous small cysts; it was not removed, and the patient has since been twice pregnant, and there has been no appearance of another tumor, nor any symptoms referable to the remaining ovary. If the climacteric had been passed there would be no question about it.

Dr. Baer inquired if tapping ever cured parovarian cysts. It was formerly reported as a means of cure. Do they always return after tapping? Would Dr. Goodell recommend tapping in undoubted parovarian cyst? He, himself, felt strongly inclined toward abdominal section in all cases. He thinks the second ovary should be removed when it is not healthy, as the idea of a second operation is very depressing to a patient.

Dr. Montgomery knew of one instance of parovarian cyst which had been tapped and had refilled seven times. It was finally removed by him by pulling out the cyst, as on opening the abdomen he found the tumor universally adherent. Only one ligature was required, viz., on the stump of an enlarged ovary which was wedged prominently into the cyst cavity.

Dr. J. G. Allen considered that as an ovary somewhat diseased may give rise to a pregnancy, it should be left. We know too little about the probability of the development of such small cysts into large ones. Until we have certain data on the subject, it must be considered a case of want of information and knowledge.

Dr. Parish was in accord with Dr. Allen as to the want of knowledge. He has seen diseased ovaries containing numerous small cysts in many autopsies, and there had been no symptoms during life to excite a suspicion of their exisience. The existence of minute cysts cannot be considered as proving any liability to the production of large ones. If the second ovary contained a cyst as large as a partridge's egg, he would remove it, but if numerous cysts as small as split peas were present he would not. The possibility of concep-

tion should be considered as well as that of a cyst.

Dr. Goodell acknowledged the truth of the points made by Drs. Allen and Parish, and he believed that he had repeatedly removed the second ovary unnecessarily. Yet the history of his own ovariotomies shows a return of the disease in the remaining ovary in about two per cent., and he thought he erred on the safe and right side. The social conditions of the patient would always have a great weight with him. If an heir were wanted or the patient were young, he would leave a suspicious-looking ovary, or try to remove the diseased portion of it. But in the majority of his cases, where there was any doubt, he removed the ovary. Of course, under such a rule, he must remove ovaries which might never give any trouble in the future. But the mental agony of women when informed that the operation must be performed a second time upon them, and on the other hand, the great joy and satisfaction of patients when assured, after the close of an operation, that both ovaries had been removed, have determined him that, other things being equal, it is better to remove the second ovary. As to the cure of parovarian cysts by tapping, his own experience is not sufficient yet to decide absolutely. He would advise the radical operation, but if the patient, after understanding the liability of return, wished it, he would tap, as there was but little danger from tapping such cysts. A patient was tapped by Dr. Atlee some twenty years ago; five years afterwards the cyst filled and was tapped by Dr. Goodell. It then partly refilled, and so remained for a long while; the fluid then was gradually absorbed and never returned. He has had beside this one or two cases which he tapped, one five years ago and the other three years ago, and there has been no return whatever of the fluid. On the other hand, he has had two or three cases in which the cyst burst spontaneously several times, and yet refilled invariably. The rupture was followed immediately by some collapse and pain, and later by an excessive secretion of urine with complete subsidence of the tumor. He had also heard of several cases of rupture, but as far as he has learned the history of such cases, the cyst has always returned. The report of the cure of ovarian cysts by tapping and injection of tincture of iodine must be true only of parovarian cysts.

Dr. Harris knew of a case of parovarian cyst in which fourteen years had elapsed between the tapping and the subsequent refilling.

Dr. E. E. Montgomery read following supplement to his paper on

Bromide of Ethyl.

I read a paper on bromide of ethyl as an anæsthetic in labor before the April meeting of this society. Although I did not attempt a history of the early administration of the drug, subsequent investigation has shown me that I did Dr. L. Turnbull injustice in not mentioning that to him we are indebted for the revival of this agent, and its first use in this country. In following the German literature, by which I was led to use this drug in labor, I ascribed its first obstetrical use to Lebert of Paris. The first case in which he used it was for the application of forceps, and occurred in March, 1881; but a paper published by Dr. Turnbull (*Med. Bul.*, June, 1880), shows that he had then used it in a second case of labor, and spoke in high terms of its peculiar advantages. Dr. H. Augustus Wilson had used it in labor prior to August 7, 1880, when he published an article upon this drug, MEDICAL AND SURGICAL REPORTER, August 7, 1880. It becomes quite evident that the first obstetrical trial of this agent was made in this city, and the priority lies between the gentlemen named. Various mixtures of the ethyl have been advocated in labor and the minor surgical operations. Booth, of Ohio (*Ther. Gaz.*, 1884–85, p. 159), recommends alcohol two parts, chloroform and bromide of ethyl, each one part.

W. H. Byrd, Quincy, Ills., *Ther. Gaz.*, March 1884, has used bromide of ethyl one part, chloroform three parts, alcohol four parts, in some ninety-eight cases, without a single unpleasant symptom. It has not everywhere received the same condemnation that is shown by the hesitancy to use it in this city. In spite of the bad name given it by two deaths under its use, and the apparently dangerous symptoms induced by experiments upon the lower animals, its use has been revived by Chisholme, *Maryland Med. Jour.*, 1882–3, ix., 388, and Prince, *St. Louis M. and S. Jour.*, 1883, xiv., 297, who strongly urge its use in minor operations and preliminary to the administration of ether. The last named has reported five hundred cases in which it was used without a single unpleasant symptom.

A leading article in the *Ther. Gaz.*, June, 1885, advocates a redistillation of a mixture of bromide of ethyl and olive oil, as a valuable and safe anæsthetic in labor. These facts are referred to simply to induce the profession to give this anæsthetic a fair trial in ameliorating the terrible suffering of natural labor.

Dr. Montgomery exhibited a

Uterine Fibroid Polyhus.

Miss R., aged 38 years, began to menstruate at 17 years. The flow was regular, quite free, lasting a week, and was accompanied with pain the first three days. Ten years ago she had a hemorrhage, and subsequently several such attacks. Two years later she had a severe hemorrhage, followed by a bloody discharge, continuing several months, since which time she has never been regular. The flow would occur too frequently, be very profuse, and attended with pain and loss of flesh. The symptoms were more marked during the last year. At one of the hospital clinics some years ago, the difficulty was ascribed to anteversion of the womb. Dr. Bournonville examined her three weeks ago, diagnosticated the condition fibroid polypus, and referred the case to me for treatment. She was quite pale, lips bloodless, complained of pelvic pain and of a constant bloody discharge, which amounted to hemorrhage upon the slightest exertion. The vagina was dilated by a tumor the size of an orange, about whose pedicle could be felt the neck of the uterus. The finger passed into the os and about the tumor without difficulty. Every examination was followed by severe hemorrhage. The pedicle was cut through by means of the wire ecraseur, and the tumor removed by means of a pair of polypus forceps.

Considerable hemorrhage followed its removal. As this was not controlled by applications of hot water, a tampon saturated with a solution of subsulphate of iron was introduced. This was removed on the second day. On the fourth her temperature ran up to 103°. She had a chill and pains in various parts of the body. These symptoms vanished under the use of quinine, digitalis and opium. Five weeks after the operation she appeared much improved, has had no bleeding since, her appetite and strength are greatly increased, the uterus was normal in size, the cervix was still dilatable and will admit the finger with pressure; the cervical membrane was in good condition.

The tumor was the size of an orange, the mucous membrane of the lower surface was ulcerated so that vessels were ruptured, allowing hemorrhage on any exertion.

The case is of interest from the long continuance of the hemorrhage, and illustrates the importance of early and careful examination of the cavity of the uterus in cases of protracted hemorrhage.

Dr. Goodell seldom uses the wire now for the removal of uterine polypi. He prefers traction with twisting or enucleation by the finger. There is less bleeding, and he is afraid of "cupping" of the fundus uteri and its injury by being included in the wire loop. He had made traction with the obstetric forceps, and enucleated tumors so large as to rupture the perineum, even after lateral incision had been made in the labia. He has partially inverted the womb, enucleated the tumor, and thus restored the organ to its proper form. The tumor sometimes occludes the os, and fœtid pus from necrosis of the growth is imprisoned above it, giving rise to a suspicion of cancer.

Dr. Baer thinks Monsel's solution may have caused the high temperature; vinegar would have been a better hemostatic, and it is also an antiseptic. From the appearance of the specimen, a portion of the adventitious growth seems to have been left behind, and it would be interesting to know the history of the stump.

Dr. Parish has removed many fibroids of various sizes, and sometimes with degenerated tissues and noisome odors. The rapid recovery of Dr. Montgomery's patient was remarkable. It is much to be regretted when any portion of the tumor is left, as necrotic change is rapid and decided in such tissue, and there is danger of blood poisoning. The pedicle, however, generally shrinks and disappears.

Dr. Goodell remarked that this tumor appeared to be sessile, and had been wholly removed. The pedicle proper is usually simply mucous membrane without adventitious tissue, and it makes very little difference if some of it is left behind, as it shrivels away and is absorbed.

Dr. Allen sometimes regretted that he was compelled to leave a portion of pedicle or tumor in the uterus, but he has never seen any bad consequences follow it. He prefers vinegar to iron as a hemostatic, and considers it as good an antiseptic as carbolic acid.

Dr. Montgomery remarked that the wire evidently brought away all the tumor. There was no evidence of any remnant on examination to day. In one case a portion of tumor or pedicle was unavoidably left, and he he removed it some time afterwards by means of a tenaculum. He wounded his finger in doing so, and suffered from septicæmia. The woman had an attack of cellulitis.

W. H. H. Githens, Secretary.

2033 *Spruce street, Philadelphia.*

Editorial Department.

Periscope.

Treatment of Cephalalgia.

Dr. A. A. Smith thus writes in the *Denver Med. Times*, February, 1885:

In considering this subject I shall include all pains, both superficial and deep, which are found above the neck. These pains in many instances are localized, as when only felt at the crown, the occiput over the temporal or frontal bones, and are due to different causes.

In persons of full habit, rich blood, and plethoric, the pain is severe and is felt all over the head. In these cases a good saline cathartic is indicated. The most common form of headache is the nervous headache, which occurs in persons who have delicate or overworked nervous systems. They suffer from headache when anything happens or is done to produce a little strain on the nervous system. The question will often occur, what will relieve this patient from nervous headache? The remedies which have proved most useful to me are bromide of soda combined with valerian:

℞. Elix. valerian. ammon., oz. 2.
Sodii bromid., drachms 4.

M. Sig.—Teaspoonful in a wineglassful of water every hour until the headache is relieved.

Anæmic headache is one of the most severe; it produces localized headaches, as on top of the head, or over the temples, and sometimes is found over the entire head. As this is due to a want of blood in the brain, any remedy which will increase the heart power will relieve the pain; with this headache we find symptoms of anæmia, as cold hands and feet, pale face, etc. To relieve the immediate attacks, a little cotton dipped in amyl nitr. and placed in the nose, answers a very good purpose.

Spts. ammonia arom. in ½ drachm doses is good, or alcohol in some form. Alcohol should be used carefully, for if the cause of the headache is not relieved the patient may take stimulants in the shape of some kind of liquor, until he has acquired the habit of drinking. But a fear of this

should not deter the use of alcohol when it is deemed necessary. You should, however, prescribe the quantity and caution the patient. To relieve the cause of these headaches, build up the system by giving tonics, cod-liver oil, iron, etc.

In sick headache, there are two causes; one a disturbance of the nervous system, the other, gastric disturbances. Sick headache from the latter cause constitutes what is called megrim. Both these are characterized by nausea and pain in the head. The diagnosis can be made from the fact that in sick headache coming from a gastric trouble the nausea is felt before the pain in the head, and vomiting relieves the headache. When caused by a disturbance of the nervous system, the pain in the head comes first, then the nausea. The gastric trouble is often caused by the kind of food taken into the stomach, and when this is the case an emetic is good treatment and will often relieve the pain; when, however, this treatment is pursued in sick headache from a nervous cause it aggravates rather than relieves the pain. The sick headache caused by a disturbance of the nervous system is not so easily treated as the former; occasionally, if the right kind of nerve stimulants are given, they will cure the patient.

One of the best is citrate of caffeine given in grain doses every half hour until three grains have been given, then, if the headache is not relieved, wait three hours and give three grains more. Caffeine can be given until the physiological effects are obtained in a small degree, with no bad effects to the patient.

There are some cases of headache due to a rheumatic tendency, which yield to salicylate of soda, grain v. doses every half hour, administered in aq. menth. piper.: the salicylate may act in a similar manner as quinine, which is good to use in many kinds of headache besides those produced by malaria. When a patient cannot sleep from sick headache, and a sedative effect is desired, croton-chloral in grain doses every half hour, or what is better, croton-chloral combined with caffeine, in some cases acts well—the administering of the chloral to be begun five hours before it is desired to produce sleep. Some believe in cannabis indica as a permanent cure for sick headache. Its action is on the central nervous system, and it may be a good remedy, but it is not a reliable drug. When given to a male the dose should be grain ½ of the extract, when to a female grain ¼, three times a day, and it should be continued for three months. Headache occurring at the menopause is very satisfactorily treated; the symptoms are a fluttering at the pit of the stomach, and a general feeling of depression. The patient thinks she is going to die, and is very low-spirited.

In these Calabar bean has been given in grain $\frac{1}{50}$ doses every half hour; this acts very well, but the following is better:

℞. Spts. camphor, drachms ij.
Bromid. sod., grains xv.

M. Sig.—Give every half hour until the headache is relieved.

Neuralgic headaches are generally localized, and are an evidence of a low physical condition of the patient. In some cases this form of headache may be relieved by the fl. ext. gelsemium, given every half hour in doses of gtt. iii., until there is a little lopping of the eyelids. There is a fear of using gelsemium, which has grown out of the using of large doses. It should never be given in doses of gtt. xx., but in small doses frequently repeated. In cases of neuralgic headache due to malarial poisoning, commence by giving quinine in grains xx. doses; give ten doses like this, and if it does not do any good, turn right around and give quinine in stimulating doses of grains ii. each. If the quinine fails, give

℞. Liquor potassii arsenitis, gtt.v.
Tincture belladonna, gtt.v.

Increasing the Fowler's solution one drop every ten days until the point of tolerance is reached, shown by the oedema of the lower eyelid. If the attack is very severe, a hypodermic injection of morphia and atropia can be administered.

If with this neuralgia is found a condition of anæmia, give iron, strychnia and quinine and build up the system with good food, and hygienic surroundings. It is necessary to say but little about malarial headaches. The drug to be given is quinine, given in the same manner as in intermittent fever. Arsenic and iron can also be given in some cases. Syphilitic headache is due either to gummy tumor, exostosis from the skull, or syphilitic neuralgia. It may in some cases be relieved by small doses of calomel, gr. $\frac{1}{30}$, given every hour for ten hours preceding the headache, which usually occurs at about the same time every afternoon.

Alcoholic headaches may be either acute or chronic; the acute form is caused by a disturbance of the digestive system and a cerebal congestion. The patient should be put to bed and given a cathartic followed by a stimulating mixture as the following:

℞. Spts. ammonia arom., drachms ½.
Tinct. capsicum, gtt.v.
Spts. camphor, gtt.xv.

M. give this every two hours, also try and get the digestive system in good condition. It is very important to give the patient sleep, good food, and keep him from getting more alcohol, as he sometimes does after a debauch.

A dyspeptic headache is dependent on a disturbed digestion, either hepatic or gastric or intestinal. A general rule can be laid down for treatment, which is founded on clinical observation. If the headache is frontal it can be relieved by the administering of a mineral acid. This can be given either:

R. Acid nitro-muriat dil. gtt.xv. Sig. in a half glass of water after meals; or gtt.v every 3 hours. When the headache is felt further up, about the roots of the hair, an alkali is indicated, as the bicarb. of soda in doses of grs. xxx, either before a meal or at any time when the headache is felt. Salicylic acid and bromide of ammonia can also be used with benefit.

The other indications in dyspeptic headache are to keep the bowels open, because constipation increases the headache by reflex action, and to overcome flatulence and improve digestion.

Gouty headaches are not uncommon. The treatment consists in giving alkalies and salines, as Carlsbad salts. The following is very useful:

℞. Vinum colchici sem., drachms 1½.
Ext. taraxaci fld., ounces 2.

M. Sig.—Drachms 1 three times a day.
Give until a decided laxative effect is produced.

It is well known to the laity that in all headaches relief may sometimes be obtained by the application of heat or cold to the head, or mustard plaster to the back of the neck. But it is not so well known that a mustard plaster to the pit of the stomach will also relieve some headaches. Counter irritation is useful sometimes in severe cases; it may be applied by blister to the back of the neck, or the thermo-cautery along the spine. Optic defects are often responsible for severe and long-continued headaches. Proper glasses will cure such. Uterine and ovarian derangements, too, are often the cause. Remove such derangements.

The Physiological Basis of Diabetes Mellitus.

The *Med. Chronicle* for Feb., 1885, says that all modern theories of diabetes mellitus are the offspring of Claude Bernard's great discovery that the liver at death contains sugar and glycogen; but they have varied with the interpretation which physiologists have put upon these facts. Bernard's hypothesis is that which has most adherents. According to it the glycogen in the liver is derived from the food, and the sugar arises in a transformation of the glycogen by means of a ferment generated in the liver, just as sugar is formed by diastase from the starch of the germinating plant. The function of the liver in respect of its glycogen is the conversion of it into sugar for the purposes of the economy. The view of Pavy is diametrically opposed to this: according to it, the liver during life contains no sugar, or a mere trace of it, nor does the hepatic venous blood contain more sugar than the portal blood, if care be taken to collect them separately. Sugar arises from the glycogen of the liver after death owing to the post-mortem creation of a diastatic ferment; and the function of the liver in regard to its glycogen store is to restrain that conversion of it into sugar which, when it does occur, leads at once to glycosuria. (Croonian Lectures, 1878.)

Prof. Seegen's researches extend over a period of ten years*, and give an entirely new bent to the theory of glycogenesis. By the use of more exact methods of analysis, and especially taking more care than Pavy did to extract all the sugar from the prepared samples of liver, Seegen has established that the liver contains at the instant when life ceases 0·4 to 0·6 per cent. of sugar. (Bernard had found 0·2 to 0·3 per cent.; and Dalton 0·2 to 0·4 per cent.; Pavy had only detected 0·02 to 0·05 per cent, but he merely strained the liver-decoction through muslin.) In like manner he has put beyond dispute the fact that, while carotid-blood and mixed venous blood from the right heart contain approximately the same percentage of sugar (viz. 0.107 to 0.153 per cent., which is a trifle in excess of the sugar of the portal vein), the blood of the hepatic vein unmixed with the common venous blood contains twice as much sugar as that of the portal vein.

If Seegen's researches support the accuracy of Bernard's original statements of fact, they completely demolish his theory. Bernard's hypothesis is so simple, and the analogy with the diastatic conversion of starch in the germinating plant is so striking, that we are apt to forget the large assumptions the hypothesis involves. The theory that glycogen of the liver is diastatically converted into the sugar of the liver by the ferment which may be extracted from that organ is clearly only tenable if the ferment is like diastase in its action, and if the sugar is such as a ferment resembling diastase can evolve out of glycogen. Furthermore, such a theory must fall if it cannot be shown that the glycogen diminishes in amount as the sugar increases. Each one of these points is assumed to be true by Bernard, without any experimental ground. He believed that he had isolated a diastatic ferment from the liver by extracting with glycerine; but, inasmuch as every soluble albuminous body may be made to yield a solution capable of converting starch into sugar,* little weight can be attached to the preparation of a ferment from liver tissue, unless the ferment closely resemble other diastatic ferments. Far from this being the case, the diastatic solution derived from the liver resembles in the slowness of its action that derived from other albuminous bodies, rather than the rapidly acting saliva or pancreatic juice. Bernard further assumed that that the sugar obtained from the liver is indentical with that which a true ferment like ptyaline or diastase evolves from starch; but this is not the fact, for the liver sugar is true glucose, while the sugar which the ferments produce from starch has a slighter reducing power and a greater rotary power than has glucose, and is probably identical with maltose (Musculos; von Mering). Lastly, Bernard definitely states, although he nowhere gives experimental proof, that the glycogen and the sugar of the liver have a reciprocal relationship, one increasing as the other diminishes. Seegen and Kratschmer (*loc. cit.*) tested the validity of this statement in the folowing manner: Having first ascertained that glycogen is always evenly distributed throughout the liver, and is not accumulated in certain parts of it, they took a piece of the liver of a recently killed, or still living, animal (dogs, cats, guineapigs, rabbits, calf, and fox), weighed it, scalded it, and determined the glycogen and sugar it contained. They allowed the rest of the liver to stand for some time, and then repeated the operation with a second portion of tissue; and then after an interval with a third, etc. The sugar and glycogen were extracted by first boiling the pieces of liver and afterwards repeatedly squeezing, triturating, and again boiling. The process occupied eight or ten hours before the last extraction was free from glycogen and sugar. The sugar so extracted was estimated by Fehling's method. The glycogen was determined in one of two ways: (1) It was entirely converted into sugar by being placed with dilute HCl in a sealed tube, and kept at the temperature of boiling water for twenty-four hours, and finally estimated as sugar by Fehling's method. (2) It was separated as glycogen by Brücke's method, absolute alcohol being used as the precipitating reagent. The animals, when it was necessary, were killed by cyanide of potassium, and the first

*"Der Diabetes Mellitus," 1875; Centralbl. f. d. Med. Wissench., 1876; Pflüger's Archiv., vol. xiv.; vol. xix.; vol. xxii.; vol. xxiv.; vol. xxv.; vol. xxvii.; vol. xxxiv.

*Lepine, Bericht d. k. Sachs. Gesellensch. d. Weissensch., 1870; Seegen, l. c.

piece of liver was rapidly excised before the heart had ceased to beat, and was plunged into a large volume of briskly boiling water in order to check post-mortem changes. In this manner it was discovered that the amount of sugar in the liver increases steadily from the moment of death, and during the next twenty-four, forty-eight, and even more hours. The greatest amount of increase is observed in the first hour, and 80 to 90 per cent. of the increase has usually been accomplished at the end of the first twenty-four hours. This rate of increase corresponds in all probability with the gradual death of the liver tissue and the cessation of its metabolic activity, which takes place at first slowly, but afterwards more rapidly. On the other hand, the store of glycogen in all animals, except rabbits, does not suffer any corresponding diminution, not only during the remarkable glycogenic activity of the first hour, but even in twenty-four hours. Rabbits form a curious exception to the rule: in them the glycogen-store begins to dwindle at once, and diminishes as rapidly as the store of sugar increases.

Claude Bernard's theory is therefore untenable, and we must look to some substance other than glycogen for the origin of liver-sugar. Seegen's observations seem to show that peptones are the substance in question. He introduced into the stomachs of dogs a considerable amount of peptone solutions, and found that their livers, in 1 to 2 hours, yielded 50 to 200 per cent. more sugar than the livers of dogs usually contain. He also injected peptone solution into the portal vein, and found that after 30 to 40 minutes the liver contained 100 to 300 per cent more sugar than the normal. In like circumstances the hepatic venous blood was ascertained to be 100 to 150 per cent. richer in sugar than is commonly the case. In order to show that this increase is due to the interaction of living hepatic tissue and peptones, and not to a derangement of the glycogenic functions of the liver through the nervous system, he took two pieces of the same liver, to one of which he added water, while to the other he added peptone solution and oxygenated blood: the latter piece subsequently yielded 3 to 4 per cent. of sugar, and the former only 2 to 3 per cent. (The faults of this experiment lie on the surface, and are much to be regretted at such an important step in the argument; the apparent excess of sugar in the one case may be explained without reference to the peptones, by the consideration that blood would prolong the life of the hepatic tissue, while water would rapidly destroy it; in one case the usual post-mortem accumulation of sugar would be favored, while in the other it would be untimely checked.)

In conclusion, it may be stated that Seegen has estimated the amount of sugar which passes into the hepatic vein of a dog in twenty-four hours, and has found that the amount of carbon in the food of a dog on meat diet, neither losing nor gaining weight, is sufficient to account for the carbon of the sugar.

The Treatment of Acute Rheumatism.

We extract the following from Dr. J. S. Bristowe's paper before the British Med. Association:

"I now proceed to quote the statistics prepared for me by Dr. Mackenzie. They illustrate mainly the influence of the salicylates in reducing febrile temperature, in curing the joint affection, and in shortening the duration of the disease. It is significant that there is no reference in them to the ill effects of the medicine.

"The following statistics are obtained from the records of 150 cases of acute rheumatism treated with salicylate of soda in St. Thomas's Hospital during the years 1881, 1882, and 1883. The cases are not selected cases to support a particular hypothesis. Every case in which the information required was to be obtained has been included until the above number had been attained.

"The salicylate was administered, as a rule, in doses of 20 grains every two hours, until the temperature became normal. It was then given in like doses every six hours for a few days, and then discontinued if no relapse took place. In all except 8 cases the temperature became normal on the second, third, or fourth day of administration of the salicylate. In a few cases the temperature went up to 100° for a night or two after it had become normal. The exceptional cases were all complicated ones. In 120 of the 150 cases, the temperature once normal remained so. In the other 30, one or more relapses with rise of temperature and swelling of joints occurred.

"The pains and swellings of joints were, as a rule, very much diminished at the same time as the temperature became normal, but did not altogether disappear for a few more days, sometimes ten days after admission.

"In 61 cases there were no complications apparent on admission. In 20 of these, signs of endocarditis subsequently developed, and were present when the patient left the hospital; 11 were cases of first attack, 7 were cases of second, and 2 cases of third, or later attack. In 2 cases where endocarditis was present on admission, pericarditis subsequently developed. The average period a patient remained in the hospital was about three weeks.

"Of the total number of cases, 64 were cases of first attack; 42 of these were admitted within two weeks of the onset; 21 were admitted at a later period of the attack. Of the 42 admitted within the first two weeks, 13, that is, 31 per cent. were free from complication; 4, that is 9.5 per cent., had murmurs on admission, which subsequently disappeared; 8, that is 19 per cent., developed murmurs during treatment, which persisted; 10, that is 24 per cent., had murmurs all through; 7, that is 16.5 per cent., had pericarditis on admission. Of the 21 admitted later, 2, that is 9.6 per cent., were free; 3, that is 14.4 per cent., developed murmurs; 14, that is 66.4 per cent., had murmurs throughout; 2, that is 9.6 per cent., had pericarditis.

"Thus, in the former class, 40 per cent. emerged without signs of heart affection, while, in the latter, only 9.6 per cent. escaped.

"There were 45 cases of second attack; 28 of these were admitted within the first two weeks; 8, that is 28.6 per cent., were free throughout; 6, that is 21.4 per cent., developed murmurs; 14, that is 50 per cent., were admitted with endo- or peri-carditis; 17 were admitted subsequently; 5, that is 29 per cent., were free throughout; 1, that is 5.8 per cent., developed murmurs; 11, that is

63.8 per cent., had endo- or peri-carditis on admission.

"There were 41 cases of third or later attack: 28 of these were admitted within the first week; 10, that is 36 per cent., were free throughout; 1, that is 3.6 per cent., had a murmur, which disappeared; 2, that is 7.1 per cent., developed murmurs; 15, that is 53.3 per cent., had murmurs throughout, or pericarditis; 13 were admitted after the first two weeks; 3, that is 20 per cent., were free; 10, that is 80 per cent., had endo- or peri-carditis on admission."

Lupus of the Larynx.

Haslund (*Vierteljahrschrift für Dermatologie*, xv., p. 471,) reports concerning ten cases of lupus of the larynx, which he observed in the common hospital at Copenhagen during five years time, and among 109 cases of lupus. The following is a brief report of what was found with the laryngoscope:

Case 1. Thirty-two year old female, who in her eighteenth year contracted lupus of the face. Especial defect of the epiglottis was noticed. It was almost half gone. The remaining part was thick and covered with scars. There were a number of red nodes, the size of a grain of oats, just above the false vocal cords. The true vocal cords normal. Swallowing was not hindered.

Case 2. Eighteen year old female, contracted the disease four months before, on the nose. Swelling moderately red, and plain node formation of the right ligamentum glossa epiglotticum laterale.

Case 3. Female, æt. 22 years, had lupus for ten years. Marked swelling and congestion of the epiglottis, and small, thickly-laid nodes on the anterior surface. False vocal cords swollen; a few nodes. Observed floating in the rima glottidis from the anterior part of the left true vocal cord, a small polyp-like tumor. Deglutition free.

Case 4. A female, æt. 17 years; sick since two years. Voice hoarse. Especial defect of the epiglottis. On the remaining part, a thick, sausage-shaped tumor behind the base of the tongue, and in the thickly swollen and cicatrized ligamentum pharyngo-epiglottica and the immediately adjoining mucous membrane of the cartiliago-arytænoidens and plica aryepiglottidens. Within the larynx, otherwise than a slow movement of the vocal cords, nothing abnormal was noticed. On a later appearance of the patient in the hospital, the mucous membrane of the larynx was swollen and filled with nodes so that the true vocal cords were covered. Death occurred from suffocation.

Case 5. Eighteen year old female. The anterior surface of the epiglottis swollen and red; thickly covered with small, smooth nodes.

Case 6. Twenty-four year old female; sick for six years. The epiglottis, with the exception of a hook-like remainder, entirely destroyed. The mucous membrane of the arytenoid cartilage and the plicar aryepiglottica, swollen and granulated; also that of the true and false vocal cords, red, thickened, but smooth.

Case 7. Fifteen-year-old female. The epiglottis was destroyed and changed into thick, uneven, scarred tumor. On the internal part of the larynx, nothing abnormal.

Case 8. Female, æt. 26 years. Lupus since three years. Epiglottis cicatrized, immovable, and on each side a piece cut out. Plica-aryepiglottis swollen thick and red. Near the root of the glottis, in the inner part of the larynx, a red, uneven, granulated tumor was found, which lost itself on both sides in the false vocal cords, and was so large that they covered the anterior half of the true vocal cords.

Case 9. Female, æt. 29 years. Had lupus since her eighth year. The border of the epiglottis was swollen, red, and covered with small nodes. On the internal part of the larynx nothing abnormal.

Case 10. Young man, æt. 16 years; sick he said only four months. Besides lupus of the pharynx the entrance of the larynx is surrounded with an uneven, knotty mass, covered with mucus and pus. Epiglottis destroyed. Respiration difficult. Swallowing free, yet painful. No lupus on the skin. Tracheotomy: improvement.

The author, besides these cases, spoke of still others from his private practice. He arrived at the conclusion that the disease commences pretty early in the larynx and seldom occasions subjective symptoms.

A Rare Case of Complete Absence of the Urethra.

Dr. Sara E. Post thus writes in the *Am. Jour. of Obstetrics* for August:

Mrs. B. presented herself at the out-department of the New York Infirmary for Women and Children, August 6, 1884, complaining of incontinence of urine when upon her feet. She said that she was 23 years of age, had been married four years, had had one child two years previously, and that at the present time she menstruated regularly and without pain, the flow lasting three days and the last period having been ended one week. As a further routine question, she was asked whether she had leucorrhœa, and she replied that when she was upon her feet she sometimes had a yellow and offensive discharge.

In regard to her confinement, she stated that she was delivered by a midwife, and that the labor was very difficult. It was not long, lasting only about six hours, but the midwife had said that she had never seen a similar case. At one stage of the labor the midwife had remarked, "The bladder is on top of the baby." This remark seemed to have made a profound impression upon the patient's mind.

Upon the third day the midwife had encouraged her to get out of bed and to try to walk, saying it would give her strength, but when she stood upon her feet a great quantity of urine burst away from her, and she fainted. She did not again rise until the tenth day; and after the getting up she did not rapidly gain in strength. The incontinence of urine dated from the confinement. The patient expressly stated that she had had no trouble with the water previous to that time. The child died in convulsions a few days after birth.

The physical examination in this case showed in front of the anus a perineum of normal depth, terminating in a membranous border identical with the virginal fourchette. The labia majora were normal in size, but the nymphæ were unusually small. Between the nymphæ in front

and above the perineum, on the level which the hymen usually occupies, was a second sphincter, whose diameter was about an inch. It was more pouting and fleshier than the sphincter of the anus, and the membrane covering it was of a pink color and thrown into folds. In front of this sphincter was the clitoris. It was in a normal position and of a not unusual size. The mons was well covered with hair.

There was no other opening for the bladder, but one vulvar orifice instead of two being present. The woman stated that she menstruated through this orifice, and that it served for coitus as well.

Upon entering this curiously guarded opening, the finger was immediately in a globular cavity, having a broad base and held open apparently by the attachments of its walls. The finger could be passed over the pubic arch in the front, and over the perineal body behind, when only a thin partition intervened between it and the rectum. In no place was the lining of this cavity thrown into rugæ or folds. It was on the contrary smooth, almost glossy, and urine followed the finger when it was withdrawn. The cavity was evidently that of the bladder. There was no urethra, and apparently no vaginal canal.

Per rectum, a uterus could be felt with its cervix pointing backwards, its size normal for the adult, the body longer than the neck, and the vaginal portion full and rounded into the external os.

Darwin's Doctrine of Evolution in Explanation of the Coming into Being of Some Diseases.

This question is discussed by Dr. Wm. Aitken in the *Glasgow Med. Jour.*, from which we extract the following paragraphs:

The present Bishop of London, Dr. Temple, in his eloquent Bampton Lectures for 1884, has fairly and well described Darwin's theory "as resting on two main pillars, namely—(1) The transmission of characters from progenitor to progeny. (2) The introduction of minute variations in the progeny with each successive generation."

The former of these may be said to be well established; and we recognize it as a law of life that all plants and animals propagate their own kind. But the latter of these main postulates has, as yet, been hardly examined at all. Each new generation shows special slight variations. But what causes these variations? and what determines what they shall be? In Darwin's investigations these questions are but slightly touched upon, beyond the statement of the fact that "the varied conditions of life induce variability." The variations are treated as if they were quite indefinite in number and in nature. "As accomplished facts Darwin concerns himself only with the effects of these variations *after they have appeared;* and while some of these variations are advantageous, some are hurtful to life. Hence we are bound to look not only to the effects of variations, but to their causes."

The same method and argument hold good regarding diseases. We must look to the causes of *variations.* They cannot be due to something *only* in the progenitors, or otherwise the variations would be all alike, which they are not. They must therefore be due to external circumstances, the antecedents and surroundings of the individual. The very slightest variations may be the outcome of the action of the surroundings upon the habit of the animal body—by the food, by the temperature, by the climate, by the soil, by the numerous and varied accidents of life in the progenitors: so that these and other such like factors being taken into account must gravely modify the conclusions which we draw concerning the ancestry of any species now existing alike in animals, in plants, and in their diseases. If we try to trace things backwards, Darwin's investigations have made it exceedingly probable that the vast variety of plants, of animals, of diseases, have sprung from a much smaller number of original ancestral forms than now exist; and the unity of plan which prevails and pervades any great class of animals, or plants, or diseases, seems to point to unity of ancestry, alike in them and in their diseases.

A Method of Detecting Lacerations of the Cervix Uteri Post-Partum.

Dr. John Bartlett thus writes in the *Chicago Medical Journal* for September:

My object is to suggest a way and a time in which laceration of the cervix uteri may be easily and certainly detected soon after its occurrence. Directly after delivery, if the fingers be introduced deeply into the vagina up to the contracted os uteri internum, and then carried in any direction a little outwardly, the flabby and floating ring formed by the non-contractile cervix may be felt, as Guillemeau described it, three hundred years ago, "like a section of large intestine." By very carefully following the entire circumference of this ring, an existing rent may be discovered. But this examination is attended with some difficulties. The patient is exhausted with her labor, and fatigued with our attentions, and just now, since "it is all over," longing for rest. She is impatient of, and perturbed by, this post-factum inquiry. Her state of mind, and possible expression of complaint, are apt to render an examination, which the physician cannot regard as absolutely necessary, less exact and thorough than it would be otherwise. And then the soft and floating margins of the cervix uteri have often somewhat of an intangible feel, if I may so express myself, gliding past the fingers like a detached clot of blood, and occasionally, in some portion of their circumference, passing out of satisfactory reach.

On these accounts it is not surprising to hear an obstetrician say that he cannot tell whether the post-partum cervix is lacerated or not. Now, I desire to teach those who may not be familiar with the short lesson that I propose to impart, how to discover a cervical laceration after labor. The error of accoucheurs who fail to recognize such a condition is that they do not make their observation of the suspected cervix at the proper time. They examine the neck actually as we have just done mentally—after the clearance of the uterus. The favorable moment for the examination—and this is the gist of my remarks—is just as the placenta is beginning to occupy and distend the cervix. The collar of flesh is then not floating and uncertain, but on the stretch, expanded, forming a distinct ring easily followed in its entire circumference. At this moment, then, just as the cervical tube is being rendered tense by the placental mass, any laceration in it may be detected with ease and certainty.

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THE CAUSES AND PREVENTION OF INSANITY.

The causes and prevention of insanity (says Dr. D. Yellowlaus before the *British Medical Association*) may well be considered together, for prevention can be intelligent and effective only in proportion as the causes are accurately ascertained and wisely avoided.

While we are quite ignorant as yet of how these causes intimately act, and while our pathology of insanity is in swaddling clothes, yet we possess quite a good knowledge of the predisposing and exciting causes, and so therefore possess the means of warding off, to a certain extent, this dire calamity.

While brain injuries from a fall or a blow may sometimes be responsible for mental alienation, yet Dr. Y. thinks friends are wont to attach too much importance to this cause, in their anxiety to disprove hereditary influence, especially when long periods of time have elapsed since the receipt of the injury and the development of the disease, without the manifestation of any untoward symptoms.

The question of overwork is dwelt upon and its evils strongly drawn; but far commoner than exhaustion from this cause, says Dr. T., is the irritation and exhaustion produced by excesses in the two most frequent forms of alcoholic and sexual dissipation.

"A man need not be a drunkard before he can develop insanity or transmit it to his offspring. If he indulge in 'nips' throughout the day, or saturate himself with beer, or cannot go to bed without his grog, he is steadily creating constitutional tendencies which will some day develop evil results."

Attention is called to the fact that the marriage relationship can be degraded into an excuse for unbridled indulgence, and that such folly or ignorance may wreck the strongest brain.

Society needs plain words about these things, and we fail in our duty if we do not speak them. Especially do we need to impress on parents the duty of wisely informing their children, lest ignorance, or, still worse, knowledge wrongly sought for, prove fruitful of evil.

Brain starvation from malnutrition or undue waste, and *brain irritation* due to disease in some other organ, are prolific causes. But Dr. Y. considers that an inherited predisposition to insanity is the most potent of all the causes that produce it, and he issues a ray of consolation to those thus threatened when he says that this predisposition is not a mysterious and fateful doom, haunting and dogging its victim, and sure one day to overtake and overwhelm him. It is a purely physical condition, and loses half its horror when this is realized.

The subject of this predisposition should not pretend to ignore it, as though it were a nameless horror or a secret disgrace. The fancied disgrace is a wretched relic of the time when an insane man was deemed something lower than a brute, and was treated accordingly. The civil and social consequences of insanity are doubtless grave, but it no more implies disgrace than any other physical illness. We are all handicapped, in some way or other, for the race of life, and much of our success depends on recognizing this from the first and running accordingly.

Supposing the heir to such an inheritance frankly recognizes the fact, how shall we counsel him to avert the malady, and how should his life be ordered so as to prevent its development and transmission? It need scarcely be premised that no organ can be in vigorous health unless this be the condition of the organism. It is an axiom in all special treatment, that the general health must be maintained at the highest possible standard.

The first condition of brain-health, as it is the first condition of the health of every organ, is due and suitable exercise. If the brain-work be unduly prolonged or unduly severe, injury must follow. Therefore our imagined patient must not pore unremittingly over the merchant's ledger, nor burn the midnight oil in exploring the arcana of science, and we must absolutely debar him from the rivalries of politics and the excitement of the stock exchange. Unwonted responsibility or undue worry tax him injuriously, and he should work within accustomed limits, and along familiar grooves which habit has made smooth. His ambition must be controlled by prudence, and he should be a servant rather than a master, and he should choose the calm and even tenor of a country life rather than mix in the rush and excitement of a great city.

Daily self-control, and wise moderation in all things, should characterize every one; but they are specially required in one predisposed to insanity, and they must be earnestly cultivated by him till they acquire the blessed ease of habit, and are practiced without an effort.

Referring to the question of marriage, Dr. Y. says that it is a grave one in these cases. If the predisposition be but slight, and of remote origin, it seems hard to forbid marriage; but we can urge that the partner selected should be of calm and well-balanced mind, and free from all nerve-proclivities. Unfortunately, excitable, unstable folk have an attraction for each other as remarkable as it is unwise. If the tendency be marked, the prohibition should be absolute. It is far better to endure isolation, and to miss the comfort and solace of married life, than to bring sorrow on others, and unknown ills upon offspring. To choose a partner beyond the age of child-bearing is one way out of the difficulty; but choice in these things is guided by feeling rather than by judgment, and love is so blind and persistent that our wisest counsels are often disregarded.

Thus, then, we have the same old story. In acquired insanity we must look for the cause and remove it; in what we might call the danger of idiopathic insanity, *i. e.*, from inheritance, we must be on the lookout to keep the body in a good condition, that it may be enabled to resist this as it would any other disease. All the same, we will continue to have a large number of insane persons, the cause for whose alienation we will ever so diligently seek for without avail.

BROOKLYN'S WATER SUPPLY.

Amid all the reports from various quarters of bad water, and as an offset to the agitation about our own water supply, we are pleased to note the satisfactory system that has been successfully in-

troduced in Brooklyn. They have a system of driven artesian wells. Iron pipes, with *steel points*, are driven all the way from 50 to 150 feet into the soil, a large number in a group, a few feet apart, and each group is connected with one large pipe. There are several such groups at different stations, and pumping engines draw up the purest, coolest, and most delightful water. From 33,000,000 to 40,000,000 gallons daily are derived in this way.

Of course, it is necessary to have a loose, porous soil, in order that these pipes may be driven, but when such conditions exist, we can conceive of no more satisfactory or cheaper method of procuring a wholesome water supply. This system is especially applicable to towns and small cities.

A number of officers from this city recently inspected the system, and are eminently pleased with it. This is certainly one of the most valuable departures in the methods of water supply that we have ever been called upon to chronicle.

THE DUTY OF HOSPITAL PHYSICIANS.

When a physician receives an appointment on the visiting staff of a hospital wherein clinical lectures are advertised to be given to students, he thereby assumes a grave duty; he really contracts to lecture at stated periods to the students who assemble to hear him.

If he neglects to fill his appointed hour, he fails in his duty.

At one of our large hospitals, wherein it is announced that three clinical lectures will be given on each Wednesday and Saturday morning, on a recent Wednesday, one hundred and fifty students sat waiting for two hours and no lecturer appeared; on the following Saturday, a like number of students *patiently* waited for one hour.

Our clinical teachers do wrong to thus waste the students' time. The session is very short, and the students have no time to waste.

If this neglect continues the students may retaliate by rewarding with *empty benches* the derelict clinical teachers when they do come to time.

WATER IS FATTENING.

It has been observed that water is fattening, that those who drink large quantities of water have a tendency to fulness and rotundity. That there is considerable truth in this observation, we have had occasion recently to substantiate.

While we should say that excessive imbibition of very cold (iced) water (especially when one is very warm) is not to be commended, yet we have reason to believe that the *unlimited* use of *pure spring water*, at its natural temperature, is not only very conducive to health, but has an actual tendency to favor a fulness and roundness of body. Whether this is the result of a better action on the part of the digestive, assimilative and depurative functions, owing to the internal cleanliness or flushing of the human sewers produced by large quantities of water, or whether water has some specific action in producing this fulness we do not know, neither does it signify, since observation confirms as a fact that the free use of water does have this effect.

NOTES AND COMMENTS.

A New Theory of Menstruation.

The *London Med. Times*, June 20, says that Dr. Loewenthal, of Geneva, publishes in the *Archiv. für Gynäkologie* (Band. xxiv., Heft. 2) a very long paper, in which he propounds a new theory of menstruation. His propositions are the following:

1. The periodical bleeding from the female genitals is not the consequence of (though mostly coincident with) the bursting of a Graafian follicle; but that of the disintegration—independent of, and preceding the bursting of the follicle—of the uterine decidua.

2. The production of the menstrual decidua is the result of the embedding in the uterine mucosa of the ovum, unimpregnated, which was last discharged from the ovary.

3. If the ovum be fertilized, the menstrual decidua continues to develop, and forms the decidua of pregnancy; if the ovum be not fertilized, it dies, and in consequence of its death, the decidua breaks down.

4. The bursting of the follicle and the menstrual hemorrhage have no other connection except that the conditions which cause and accompany the bleeding may determine the moment at which a ripe follicle bursts.

5. The connection between the bursting of the follicle and menstruation is not a necessary one. Each may occur independently of the other. A follicle may burst without the formation of a menstrual decidua; and the hemorrhage, being the result of changes determined by the ovum last discharged, may occur without the bursting of a fresh follicle.

6. The periodicity of menstruation is dependent upon the duration of the extra-follicular life of the embedded, but unimpregnated ovum. The deviations from periodicity depend upon shortening or absence of this extra-follicular life.

7. Pregnancy takes takes place in an ovum which has been discharged from its follicle, generally at the last menstruation, and is in normal cases in the uterus, but in abnormal cases may be outside it. From this theory the author draws the following practical conclusions:

8. That the menstrual bleeding is neither a physiological function nor an accompaniment of one; but is a consequence, made habitual by innumerable repetitions, of a state of things artificially produced, viz., the non-impregnation and death of the egg; it has all the peculiarities and effects of other undoubtedly pathological hemorrhages.

9. It is increased and diminished by the same causes as other hemorrhages.

10. The hemorrhage accompanying the discharge of the menstrual decidua is to be regarded as harmless only if it takes place by diapedesis; if it is more active than this it is unnecessary, and if felt by the organism as a loss it is hurtful.

11. The degree of its injurious effect depends upon the relation between the amount of blood lost and the quantity and quality of the blood present in the body at the time.

12. In these conditions the indication is to check the menstrual bleeding, like any other, as much as possible.

13. For this purpose, the means chiefly to be recommended are rest in bed and hot water injections.

14. On the other hand, idiopathic amenorrhœa should in no circumstances be regarded or treated as a disease; it is only a sign that a function (ovulation) which is not necessary to life, is, from some cause, not being fulfilled.

15. It follows from the author's theory, and from the observations of Mr. Lawson Tait, that in cases in which the anticipation of the menopause is indicated, salpingotomy, that is, partial resection of both tubes, should be performed instead of castration.

16. If for any reason castration has been attempted, and it is found impossible to remove the ovaries completely, salpingotomy is directly called for.

Dr. Loewenthal's theory, and the reasoning by which he supports it, is certainly ingenious, whether it be correct or not, and for that reason we quote his paper.

Transplantation of a Rabbit's Eye.

Dr. Chibret executed recently a very interesting operation, as we learn from the *Allg. Med. Centr. Zeit.*, 64, '85. He took the eye of a rabbit and transplanted it to one of his patients whose eyeball had been extirpated on account of the pressure of a foreign body, which had given rise to sympathetic iritis. The operation is said to have been very successful, but the report was probably published, as is so often the case with French authors, immediately after the performance of the operation. Had the doctor waited but a month or two, he would have observed such a decided shrinking that he would probably have regretted the plastic operation, and the patient would have come to the conclusion to wear an artificial eye rather than walk about thus disfigured. But the most ridiculous part of the whole is the simplicity of the good doctor; for at the conclusion of his report he wisely remarks that the time would probably not be far distant when the eyesight could be restored in the same manner, and he even inclined to the belief that such a happy occurrence might probably take place in his own patient!! How anybody can conceive such a queer notion is scarcely comprehensible, but how a doctor possessing some knowledge of physiology and anatomy could honesty believe such a fact possible is still more difficult to understand. Probably the superintendent of Bedlam or those in charge of similar institutions can better explain the matter. Meanwhile the case naturally has run through all secular papers, and given rise to a great deal of speculative imagination.

Micro-organisms in Diseases of the Eye.

A foreign exchange tells us that an interesting paper on this subject has been contributed by Dr. Widmark, teacher of ophthalmic surgery in Stockholm, to a recent number of the *Nordiskt Medicinisk Arkiv*. He has made a series of researches with the object of testing the accuracy of the idea put forth by Sämisch, Leber, Hirschberg, and other ophthalmologists, that serpiginous or creeping ulcer of the cornea is the result of infection, and that, when it complicates dacro-

cystitis, it is produced by micro-organisms passing from the lachrymal sac. In 37 cases of dacrocystitis and two of serpiginous ulcer of the cornea which he examined, Dr. Widmark found micrococci, rarely single, often forming streptococci, and most frequently diplococci. He succeeded in making pure cultivations of these micro-organisms in a jelly of ox-blood serum, and in inoculating therewith the eyes of rabbits; the result being in all cases the production of ulcerative keratitis with hypopyon. The operation was done by making an incision with a Gräfe's knife in the substance of the cornea, and introducing some of the cultivation-material with a small spatula. Twenty inoculations were made with uniform results; while of 10 control-experiments with sterilized gelatine, the results in all were negative. Subcutaneous inoculation of the cultivation-material on five rabbits was followed by abscesses, the pus from which, when inoculated in the cornea, produced ulcers. In concluding his paper, Dr. Widmark suggests that the chief reason why operations on the eye are rarely followed by suppuration, is that any microbes which may be present are washed away by the tears, or prevented from aggregating by the abundant and rapid secretion of the aqueous humor.

The Effects of Lightning-Stroke.

The *Lancet*, August 22, tells us that at a meeting of the Berlin "Verein für Innere Medicin," Dr. Liman described the changes present in the bodies of two men who had been killed by lightning when taking shelter under the trees of the Thiergarten. In the one subject, the hair over the left temple was singed, and the skin from the left ear to the shoulder-blade was discolored a brownish-red, the chest and abdomen being covered with red and white streaks. Reference was made to the dendritic figures described in many cases, and attributed often to impressions of twigs, leaves, etc. (a specimen of which was figured in our columns not very long ago), and in this body there was a figure which could be compared to a palm-leaf, but which was undoubtedly due to the contact of the folds of the shirt. The parts thus pressed upon remained white, the surrounding skin being reddened. The apex of the heart was the seat of an irregular cavity, which communicated with both ventricles; evidently the lightning-stroke had caused rupture of the organ. In the other case, the skin and hair were similarly excoriated and singed, and numerous ecchymoses occurred beneath the serous layers of the pericardium and pleura; the lungs were much congested. Here death was evidently due to asphyxia. Dr. Liman mentioned, and Professor Leyden confirmed, the fact that death by lightning is occasionally accompanied by rupture of internal organs, as the brain and liver.

Infectious Peritonitis in Virgins.

The *Brit. Med. Jour.*, August 29, 1885, tells us that Dr. Snyers has described, in the *Annales de la Société Méd. Chirurg. de Liége* (*Journal de Méd. et de Chir. Prat.*, 1884), two interesting cases, which seem to show that the virus of erysipelas can cause, in women who have never had intercourse, an acute form of peritonitis, similar to that observed in puerperal cases. A young woman (a virgin), aged 18, was suddenly seized with symptoms of acute peritonitis five weeks after a servant in the house had been taken ill with erysipelas of the face; death ensued in thirty-six hours. Shortly afterwards, the brother of the young woman had an attack of erysipelas on the arm; this did not cause much anxiety at the time; but, a fortnight later, the second sister, aged 20 (also a virgin), was seized with the same symptoms as the first, and died in less than two days. At the post-mortem examination, Dr. Firket failed to discover any local cause by which the origin of the inflammation might be explained. The spleen was much swollen, and the blood had the same appearance as in cases of infectious diseases.

Rearing Premature Infants.

The *London Med. Times*, August 22, tells that Prof. Tarnier presented at the Académie de Médecine two children born at the sixth month, whom he had succeeded in rearing by the aid of the couvreuse (a sort of an incubator), and forcible feeding with woman's milk. Eight grammes of milk were injected through a caoutchouc tube into the stomach every hour for the first three days, and then sixteen grammes were injected every three hours. It is necessary to begin with small quantities, or the child becomes swollen by an acute œdema through hypernutrition. The couvreuse is used at a temperature of 30° to 37° C. The younger the infant, the higher the temperature employed. Dr. Blot observed that he regarded the couvreuse as a useless procedure, as the same results are attainable by the employment of cotton and bottles of hot water. M. Tarnier said that during the employment of the couvreuse he had on several occasions been astonished at the rapid disappearance of the sclerema of infants.

The Management of Pregnancy.

In the *College and Clinical Record*, Prof. Parvin says: Let the patient eat but little in the latter months, though she may eat a little frequently during the day. A large meal causes much inconvenience, due to the already enlarged abdomen. A bandage properly applied around the abdomen is useful and comfortable. She should sleep eight hours; and take an occasional bath in tepid water. If leucorrhœa be present, let her use an injection of salt water, and bathe the external genitalia with tepid water.

Care of the Breasts.—Use oily matters, and no alcohol. In the morning the nipples may be painted with equal parts of tinct. arnica and water, but in the evening should be covered with cocoa butter.

High-heeled shoes should be dispensed with during pregnancy.

The Insanity of Masturbation.

Dr. C. B. Burr tells us in the *Cinn. Med. News* for August that about ten per cent. of all the patients at the Eastern Michigan Asylum suffer from this form of disease, and he thus formulates the delusions and peculiar manifestations which he regards as characteristic of this form of insanity:

1. An intense vanity and self-love.
2. Extreme selfishness and disregard for others.
3. Religious delusions and perverted moral sentiments.
4. Delusions referable to the sexual system.
5. Hallucinations of sight and hearing of a certain definite character.
6. Emotional disturbances.
7. Homicidal impulses and a disposition to commit sudden acts of violence.
8. Certain physical disorders referable to an impaired state of the nervous system.

More Evidence for Cascara Sagrada.

From a foreign exchange we learn that Professor Grasset, of Montpellier (*Semaine Medicale*, No. 6), observes, founding his statement on the thesis of Dr. Eymeri, that the experiments of French observers have quite confirmed the value attached by the American physician, to the *cascara sagrada* as a remedy for habitual constipation. Two or three solid stools are produced, but if the administration is then discontinued, the constipation will recur. To be effectual, the treatment requires to be persevered in for two or three weeks or a month. A dose of one grain of the powder is given night and morning for a week, and then it is continued every other day, gradually diminishing the dose and increasing the intervals, until the stools are produced spontaneously. As far as yet tried, it would seem to be the most efficacious of remedies for chronic constipation.

Artificially-fed Infants.

We are constantly reading tirades against the artificial feeding of infants, and yet the vice is on the increase. To combat its baneful influence we cannot too often refer to it. Hence, we reproduce the conclusions of Dr. Addison H. Foster on the subject, from the *Chicago Med. Jour.* for August:

1. The artificially-fed city infant too often inherits an enfeebled nervous and physical organization.
2. Its surroundings are rarely of an invigorating character.
3. It usually has a desperate struggle for life with an imperfect diet, for even new milk from the prairie-fed Chicago cow is likely to be harmful.
4. The wonder is, that so many escape death at the hands of over-anxious, but unwise attendants.

Oleate of Mercury in Hepatic Congestions.

Especially among hard drinkers do we frequently observe those obstinate congestions of the liver that seem unwilling to yield to the usual remedies. Dr. C. A. Bryce writes about such cases in the *Southern Clinic* for September. The patients cannot eat, sleep, sit still, walk about or lie down—they have headache, a terrible taste in the mouth, and in fact are thoroughly miserable and had rather be dead than alive. Upon examination, the liver is found considerably enlarged. There may be constant pain over the liver, persistent pain, or even intestinal hemorrhage. In such cases, Dr. Bryce has had most satisfactory results from the use of oleate of mercury in the form of a twenty per cent. ointment, rubbed well into the skin every night.

Determination of Casein in Cow's Milk.

The *London Med. Times*, August 29, tells us that J. Frenzel and T. Weyl (*Zeit. Physiol. Chem.*) have proposed a method of precipitation by dilute sulphuric acid, after previously diluting the milk with three vols. water. The results obtained by this method are compared with those of Hoppe-Seyler's, which consists in acidification with acetic acid after previously diluting the milk to 20 vols. and completing the precipitation by passing a

stream of CO_2. The effect of varying the conditions of precipitation was also investigated. The results differ but slightly from those obtained by Hoppe-Seyler's method, over which the authors' has the advantage of being more expeditious.

CORRESPONDENCE.

Labor at the Seventh Month with a Prolapsed Uterus.

EDS. MED. AND SURG. REPORTER:—

I was called September 11, 2 p. m., to attend Mrs. O., primipara, æt. 18, and found the uterus pressing on the perineum, the os only slightly dilated. The uterus was so much prolapsed that in making the examination the finger would touch the os without having to enter the vagina.

It being the first case that I had ever had where the uterus was almost external, I was a little uneasy for fear the presenting part would be external to the soft parts before the first stage of labor would be completed.

Labor came on in earnest the morning of the 12th, and was completed at 9:30 a. m. The uterus receded a *little* as dilatation progressed. I had to rupture the bag of waters, and I am not exaggerating when I say two and a half gallons of water escaped, and it came with a gush, and brought a repulsive looking object with it. It was a foot presentation. The child's head looked like a large frog's head. There were two large ulcers on its back, and the only sign of life that could be detected was in the beating of the heart. There was not a movement of any part of its body. Its heart ceased to beat in about an hour.

It was no doubt a case of spina bifida. There are three points of interest in the case. First, the extreme prolapsus; second, the great amount of water; and third, the condition of the child.

I would be glad to hear from the profession in regard to such cases, and if there is any means by which a prolapsed uterus can be replaced, being distended as that one was, for the mother looked as large as most women do at full time. The mother is making a nice recovery.

S. R. MILLEN, M. D.

Clarinda, Iowa.

Disinfection After Small-pox, etc.

EDS. MED. AND SURG. REPORTER:—

I see in various journals, among them the MEDICAL AND SURGICAL REPORTER of August 22d, advised the burning of three pounds of sulphur to 1,000 feet of space, to disinfect a room after small-pox, scarlatina, cholera, diphtheria, etc. Did any one ever burn that amount in the space for that purpose? I doubt it. I believe three ounces would be enough. I was fully satisfied with that amount after small-pox thirty years ago, and would be now. As to cholera, it looks to me as though the average physician thirty or fifty years ago knew as much about the treatment as those who now claim to be advanced hygienists do now. That don't say much for the old ones, either.

W. H. DAVIS, M. D.

Burlington, Iowa.

NEWS AND MISCELLANY.

Penitentiary Food.

An ex-convict contributes a lengthy article to the *Press* (September 27) detailing his experience during an imprisonment of two years in the Eastern Penitentiary. Speaking of the food given the convicts, he says:

"The prisoners' food has often been spoken of in the papers, but I hope that a few words here may not be out of place. At breakfast time each man receives sufficient bread to last him for his three meals. He is asked how much he wants, and is given all he asks for. The quality of the bread is excellent; it is, in fact, far superior to most that is bought in Philadelphia bake-shops. It is good, wholesome home-made bread; the flour is made in the institution, and a remark of one of the keepers on being spoken to by the writer concerning the good qualities of the bread may best describe it to my readers. He said; 'I would like to have one-half as good for my family.' For breakfast, the prisoner is given a pan of coffee, which, with the bread, goes to make up the meal. For dinner on Mondays, Tuesdays, and Saturdays, he receives a pan of mutton soup, which contains a large piece of meat, some potatoes, and other vegetables: on Wednesdays, he is given a pan of bean or pea soup and a piece of beef; on Thursdays, a pan of beef soup and vegetables; on Fridays, either oatmeal and milk, cornmeal and milk, rice and sugar, buns and cheese, or fish and potatoes boiled in their jackets. He receives all of these at different periods of the year, at least this has been the course during my imprisonment, although any or all of them are liable to be replaced by something the doctor thinks more suitable, as he has the control of the food. On Sunday the prisoner enjoys a dinner composed of a piece of pork and some baked beans, and when tomatoes are in season the mutton and beef soup is filled with this excellent vegetable. On every day but Friday and Sunday the prisoner receives from two to six undressed tomatoes, which he generally slices up in vinegar and enjoys for supper. He also receives for at least two months in the year on Saturdays Irish and sweet potatoes, boiled in their jackets. On Thanksgiving and Christmas the prisoner is given six or seven apples; he also receives on Christmas a dinner of roast beef, potatoes and turnips mashed together, with a bountiful supply of gravy, and on New Year's he is given a large Dutch cake. This comprises the full dinner bill of fare during the year. The supper consists of tea, bread, and whatever the prisoner has saved from dinner and warmed over.

Luncheon Habits of Prominent Men.

It may be of interest to learn the habits in this respect of some of Philadelphia's lawyers whose names are well known throughout the State. From a lay contemporary we learn that the late Lucas Hirst, who left a considerable fortune to found a free law library, had reduced the science of sustaining existence down to such a point that, it is said, he could live on one bun a day, and be happy. Judge Ludlow, who knows how to order as good a dinner at 6 as well as any man in town, finds a sumptuous luncheon in two wheaten

crackers and a bowl of ice water. He carries the first in an old pen box, securely fastened with a big rubber band. He eats them punctually at 2. If court lasts beyond the ordinary closing hour, he regales himself with another cracker that he keeps in reserve for such occasions. When, as sometimes happens, court adjourns before 2, he prudently saves his wheaten delicacies for another day. Mr. Richard C. Dale, who holds all the lines of the Reading Railroad Company's litigation in his hand, is a daily patron of Joshua L. Baily's coffee-house on Fourth street. His lunch never varies. It consists of one basin of wheaten grits (five cents) and one big glass of milk (one nickel). Lawyer Williams, who writes very learnedly on questions of rent and real estate, is also a patron of the coffee-house. But he is more extravagant than Mr. Dale, and thinks nothing of indulging any day in a beefsteak, which alone involves an outlay of ten cents. United States District Attorney Valentine limits his luncheon in the warm weather to two little peaches and one big apple, or two little apples and one big peach. In winter he has a nice ham sandwich he brings from home, wrapped up in a dainty white napkin. F. Carroll Brewster takes a cup of consomme at 3 every day. Just that and nothing more. He has been going to the same restaurant for twenty years. George H. Earle stops at high noon, as regularly as the clock strikes, to peel and eat one big red apple and one nice yellow banana. John G. Johnson, whenever he finds time to eat in the daytime, indulges in some oyster puree and a dish of ice cream. He varies this occasionally by leaving out the puree. City Solicitor Warwick has a fondness for oysters fried, and never takes anything else for lunch, except when he asks some one out with him. Then he invariably orders champagne.

Licenses to Practice Medicine in Japan.

The *Supplement to the Transactions of the Sei-i-Kwai* for May, 1885, contains a copy of the regulations for the examination of candidates for licenses to practice Medicine. The Minister for Home Affairs is to hold examinations twice yearly, six months' notice of the time and place being given. At the time of the examination, he is to appoint an examining committee selected from hospital physicians, or from physicians and chemists of known medical knowledge; a dentist may also be appointed in the case of examinations for licenses in dentistry. A manager is to be appointed to superintend the examinations. The examinations for the license to practice medicine are divided into two parts, unless the candidate can take the whole examination at once. For the license in dentistry there is but one examination, the subjects being dental anatomy and physiology, dental pathology and practice, dental medicine, dental mechanics, and a practical examination. The subjects of the two examinations for the license to practice medicine are: first, physics, chemistry, anatomy, and physiology; second, theory and practice of surgery and of medicine, materia medica, ophthalmology, obstetrics, and clinical observation. A course of study of not less than a year and a half's duration must be pursued before the first examination, and an additional course of like duration before the candidate can be admitted to the final examination. The answers to the questions are to be given in writing; but, under certain circumstances, they may be given orally. Candidates who pass are to receive a certificate, attested by the manager and the examining committee. Rejected candidates are not admitted until after a lapse of at least six months. The fees are, for the primary examination, three *yen* (about three dollars); for the final examination, five *yen;* and for the examination for license in dentistry, five *yen*. The fees are not to be refunded in case of inability to attend or complete the examinations.

The Disinfection of Sleeping Apartments.

The *Med. Record* tells us that Professor König, of Göttingen, in an article on this subject in the *Centralblatt für Chirurgie*, says that at one time, while he was practicing medicine in Hanau, he suddenly discovered that his bed-room was thickly inhabited by bugs. A friend assured him that he could speedily rid him of the pests, and proceeded to fumigate the apartment with corrosive sublimate. The success of this measure was most gratifying, and when the room was opened the dead bodies of various kinds of insects were seen strewn about the floor. This incident led the writer to hope that the same means would be effectual in destroying the infectious elements of contagious diseases, and a trial in private houses after scarlet fever or measles, and in hospitals after erysipelas or pyæmia, gave most satisfactory results. Since adopting this method, he has never seen a second case of a contagious disease which could be attributed to infection remaining in the room in which the patient had been confined. The mode of procedure is very simple. From one and one-half to two ounces of corrosive sublimate are put on a plate over a chafing-dish, and then the windows and doors are closed. At the expiration of three or four hours the windows are opened, and the apartment is thoroughly aired. The person entering the room should take the precaution to hold a sponge or cloth over the mouth and nose in order not to inhale the vapor. The following day the windows are again closed, and some sulphur is burned, in order to neutralize any of the mercurial fumes which may still linger about the furniture and other articles. The room is to be again aired and cleaned, and will then be ready for occupancy.

Anti-Vaccination Riots in Montreal.

On the 28th of September the system of compulsory vaccination was put into operation in Montreal. In the evening a howling mob surrounded the East End Branch Health Office, and completely wrecked the building. The police were powerless, and the mob, gathering strength from this, marched upon the Central Office in the City Hall. By this time, however, a riot alarm had been sounded, and a strong force of constables were gathered inside the City Hall, but having no one command them, the mob drove them out of their way like so many sheep. After the mob had smashed the Central Office, they turned their attention to the Central Police Station, and soon

had all the windows in that building broken. Revolver shots were freely fired at the police. To scare them, the police fired over their heads, only to be received with jeers and laughter. Things now looked so bad that the police were armed with rifles with fixed bayonets, but happily it was not deemed necessary to use them. The constables instead charged the mob with their staves, clubbing right and left, and succeeded in scattering the rioters. In the fight, however, the windows of the Court House, opposite the City Hall, were smashed. The mob later, in detached bodies, paraded the streets and broke the windows of the *Herald* office and the windows of the offices of the medical health officer, chairman of the Finance Committee, and public vaccinators. A number of arrests were made. The city is in a state of great excitement.

The Russian Military Medical Service.

An English exchange tells us that a sad picture is drawn by "Stepniak," writing in *The Times* of a recent date, of the moral condition of the medical department of the Russian army. It is well known that bribery and peculation are almost universal amongst Russian officials; but according to "Stepniak," the posts occupied by medical officers are so largely administrative that they offer peculiar facilities for making money by collusion with contractors. Thus the charge of a hospital is considered a specially valuable appointment, and large bribes are demanded by the high administrative officer for nominations of this kind. In some cases even an annual tribute is enforced, the amount of which depends upon the extent to which so-called "saving" and "economies" can be practiced. It is well understood by the Russian people that in case of another war the soldiers would have bad bread and bad provisions generally; they would have to march barefoot, as contractors would arrange to deliver boots after a battle instead of before; and when sick or wounded they would be without coverings, and they would receive cream of tartar instead of quinine, the "savings" thus effected going into the pockets of medical and other officers.

What Presidents Like to Eat.

President Garfield's steward, who keeps a restaurant in Washington, and who has been steward for three presidents, says that General Garfield had the dyspepsia all the time he was president, and he lived largely upon beefsteak and baked potatoes up to the time he was shot. President Hayes always had at least fourteen at his dinner table, and he was a generous liver. He was very fond of candy, and his wife liked angels' food cake very much. President Hayes always ate oatmeal for breakfast, and he liked the best mixture of Mocha and Java coffee that money could procure. He was not at all stingy, and his state dinners cost about $15 a plate. Garfield was fond of breakfast bacon well fried, and he used cream instead of butter on his baked potatoes. Both Hayes and Garfield breakfasted early, and their last meal was over by 6 o'clock. He did not like to work for President Arthur. He kept his cooks up half the night, and it was almost daybreak before the dishes were washed.

A Novel Telephone.

The following ingenious device is resorted to by those convicts in the Eastern Penitentiary who are condemned, for bad behavior, to undergo a season of solitary confinement. By placing the pan in which he receives his food upon the steam-pipe, and talking into it, the prisoner can be heard very distinctly the full length of the entire block, although he speaks in an ordinary tone. This is by far the best means of communication, and is of very recent origin. The officers are probably not aware of its existence, as it is impossible to be caught, provided the talkers know how to manage it properly.

Another method is a system of telegraphy, with which the Morse alphabet was used. A piece of wood or iron served as a key. By striking the steam-pipes which ran through the cells, the sound was transmitted along the entire block.

Absinthe.

The *Med. Summary* says that the alarming increase of this drink in America is to be regretted. Theatrical people, it appears, take too readily to the drink. The consumer, after the habit has become established, loses the ruddy hue of health, becomes careworn and emaciated, and lays the foundation for paralysis of the cerebral structure, and the nerves arising or leaving place therein. The dipsomania resulting from the habit is of a violent nature and terminates in many instances in idiocy and dementia. There is but little chance of a cure being established.

Absinthe is made from wormwood, angelica root, sweet flag root, and alcohol; but an inferior kind is manufactured from essential oils and is colored with indigo. Unless the profession take active measures to combat the already existing habit of absinthe drinkers a nation of demented idiots will soon arise in our country.

The Cardiff Epidemic of Typhus.

Owing to the combination of the distress in Ireland with the progress of large constructive works in Cardiff, the period of 1846–7 witnessed a large influx of the poorer Irish into the town. Many of these came from Clonakilty and Skibbereen, where typhus fever in a malignant form had been raging; and as some of these poor creatures arrived with the disease upon them, and others brought with them its seed, the immigration caused an outbreak of such magnitude in this town, that 322 cases of typhus and 93 of dysentery, the latter being sequelæ of the former, were treated in their own homes. Besides these, 186 were received into a temporary hospital, utilized for this purpose. The total mortality from this epidemic was 142; and the severity of the epidemic eventuated in an inquiry as to the sanitary condition of the town.

Daudet on Eating.

Daudet is smashing some of the old ideas on the subject of eating. He says: "When I wrote the 'Nabob' I worked twenty-four hours every day. One becomes intoxicated with work, and I found that my digestion was much better if I ate while I worked. I always took my meals to my writing table, and the result was invariably satisfactory.

You know that if you go to bed immediately after eating the digestion will accomplish itself during sleep. The same with writing. Commence immediately after you have swallowed your food. Don't wait for digestion, or you will feel heavy and incapable. I can assure you that this physiological law has been a veritable godsend to me."

Official List of Changes of Stations and Duties of Medical Officers of the United States Marine Hospital Service, for the week ended September 19, 1885.

Vansant, John, surgeon. To proceed to New Orleans, September 16, 1885.

Hutton, W. H. H., surgeon. When relieved, to proceed to Mobile, Ala., September 16, 1885.

Long, W. H., surgeon. Granted leave of absence for ten days, September 1, 1885. When relieved, to proceed to Detroit, Mich., September 19, 1885.

Fessenden, C. S. D., surgeon. To proceed to Norfolk, Va., September 16, 1885.

Sawtelle, H. W., surgeon. When relieved, to proceed to San Francisco, Cal., September 18, 1885.

Godfrey, John, surgeon. When relieved, to proceed to Louisville, Ky., September 16, 1885.

Goldsborough, C. B., passed assistant surgeon. When relieved, to proceed to St. Louis, Mo.

Dead in a Barber's Chair.

"Shave me," said a rather small, pale-faced man, as he carelessly threw himself into a chair at a barber's shop, last Sunday. When the barber had finished the stranger remained motionless, and when spoken to never answered a word. "Sleepy," half muttered the barber as he shook his customer, but when he had looked more closely at the pallid face, and could hear no breathing. he found the man dead. It was afterwards learned that the dead man was named Henry Edwards. He was an Englishman, had not been in this country long, and had laid by a considerable amount of money to take home to his family next Christmas. His death is attributed to either apoplexy or heart disease.

Typhoid Fever at Bryn Mawr and Fernwood.

Owing to reports of typhoid fever in these localities, Dr. Benjamin Lee, Secretary of the State Board of Health, recently called the attention of the city board to the condition of outlying towns and villages being a constant menace to the health of the city. He suggested that, as such districts are entirely without local health organizations, and the cases of infectious disease are not of sufficiently frequent occurrence to warrant the State Board in employing a special corps of officers for the work, the State Board should be empowered to call upon the experienced officials of the City Board. A request to detail health officials upon two cases of typhoid fever, one at Rosemont and the other at West Fernwood, was granted.

Action for a Surgical Fee.

M. Labbé, the well-known Parisian surgeon, performed ovariotomy in a lady in 1881, having fixed his fee at 1,500 francs only in consequence of the pecuniary circumstances of his patient. The operation proved fatal; and not having received payment, M. Labbé, in 1883, brought an action against the husband and his nephew, who were joint heirs of the deceased. They refused payment on the ground that the operation, which was performed in a *maison de santé*, so far from taking place with the consent of the husband, did so in spite of his opposition to it. The tribunal, however, chiefly relying on a letter of the husband acknowledging the debt, condemned the defendants to the payment of the sum sued for.

Sanitation in Naples.

In Naples, efforts have been made to introduce a better water supply, the immunity from cholera enjoyed by Rome having been so clearly due to the purity of its waters, the only sanitary condition in which it had any advantage over other Italian cities. In all other respects Naples remains what it was last year. Improvement schemes were invited, and numerous plans sent in, but the municipal council were under the necessity of rejecting them one and all, since though drawn up regardless of cost, and calculated to make Naples one of the grandest cities in the world, they left out of consideration the poorest quarters, and those in which improvement was most needed.

A Physician Convicted of Murder.

The trial of Dr. John D. Pitts, of Accomac county, Va., for the murder of Dr. Littleton T. Walter, over a year ago, on Tangier Island, was concluded recently, and the case was given to the jury. The jury have rendered a verdict of five years in the penitentiary. The case has attracted great interest throughout Eastern Virginia and Maryland, owing to the prominence of the prisoner's family and the extraordinary efforts made by prosecution and defense. Solicitor General Goode appeared among the counsel for the prosecution. This was the second trial, the first resulting in a sentence of eighteen years in the penitentiary.

Cholera in Europe.

The following recent dispatches will give the present status of the cholera epidemic in Europe:

"MADRID, Sept. 28.—There were 560 new cases of cholera and 203 deaths from the disease reported yesterday throughout Spain."

"PARIS, Sept. 28.—Reports received to-day from various parts of the Alpes-Maritimes, the southeasternmost department of France, show that cholera is spreading throughout the district."

ROME, Sept. 28.—Dispatches received to-day show that the cholera is decreasing in Sicily. King Humbert proposes to visit the infected district there.

"King Humbert has given $25,000 toward relieving the cholera sufferers at Palermo. This generosity has aroused intense enthusiasm among the Sicilians."

"PALERMO, Sept. 28.—There have been reported in this city to-day 162 new cases of cholera, and 94 deaths from the disease."

Bismarck's Temper.

London Truth says that a good story is told of Prince Bismarck and his favorite doctor. It was at Karlsbad where they met. The prince, feeling unwell, sent for Dr. Schweininger, who began to put all sorts of questions to him. At last the

prince lost his temper and exclaimed, "What on earth are you driving at, doctor?" Nothing disconcerted, the latter replied: "I am at your orders, prince, but if you wish to be treated without being questioned, you had better send for the veterinary surgeon, who is accustomed to physic in that way."

A Child Poisoned by Opium Pills.

A four-year-old daughter, visiting her grandparents in Trenton, while her mother was taking a nap, found a bottle of quarter-grain opium pills that had been prescribed for her mother, and ate some of them, how many is unknown. By her hawking and spitting some time afterward her mother's attention was called to her, and the fact that she had taken the pills discovered. Four physicians were called at once, but the child will likely die.

A Singular Accident.

In the *Medical Summary* Dr. E. C. Rothrock says that some two months since the daughter of a gentleman in Athens, Texas, had occasion to call on an eminent surgeon. It appears that her infant boy, aged three years, had seated himself on a chamber pot and that the same had broken under his weight and cut the gluteal muscles severely. The surgeon washed the wounds and sewed them up without delay, and the boy recovered rapidly, without scars.

Nearly Buried Alive.

Dr. R. Pringle says that he saw a soldier who was supposed to be dead from cholera, put into a stretcher with a pick-axe and spade to be buried, but who was found sitting up when his companions came to bury him. He also relates the case of a Bengal civilian, now a government officer, who heard the door shut and the order given for his coffin; and he hints that the dead-houses of India, during cholera epidemics, could tell many similar ghastly tales.

Bismarck's Beer.

The Pope has desired the Chapter of Franciscan Monks to suppress the numerous breweries belonging to the order in Bavaria; so there will be no more of the famous "Franziskaner Brau," which is so highly esteemed by all beer-drinkers in Germany. The personage who will most deeply regret (and resent) this step will be Prince Bismarck, who was a large consumer of this particular brew, of which he is exceedingly fond.

A Bulldog Eating a Child.

At Goes Station, three miles from Xenia, O., Mrs. Parsons missed her 4-year-old daughter recently, after having seen her playing in the yard. Making search, she found the child's dead body beneath a bulldog, that had killed the child and was eating its flesh. The dog had to be killed before the child's body could be recovered.

Strangely Similar Accidents.

Almost at the same instant on Friday, September 25, that one man was killed and three more injured by the fall of a derrick of Drake, Stratton & Co., at Schuylkill Haven, another derrick of the same firm broke at a tunnel near the scene of the first accident, and Amala Cossoti was instantly killed, and ten other men, whose names are unknown, were seriously injured.

Andrew Murphey, M. D.

At a meeting of physicians, resolutions of respect to the memory of Dr. Andrew Murphey, of Parkesburg, Chester county, Pa., and of sympathy and condolence with his family were passed. They were signed by a committee composed of Drs. Eber Huston, T. A. Taylor, and E. V. Swing.

Typhoid Fever at Fernwood.

Dr. Frank Rowland, of Media, has five cases of typhoid fever in one family at West Fernwood. The mother of the family has already died, and other deaths are expected. The ground in this vicinity is low, the soil a heavy clay, while no provision is made for the removal of refuse.

Interesting Cases at Blockley.

At a recent meeting of the Board of Guardians of the Poor it was decided to ask Councils for money to print an annual report containing a statement of all the interesting medical and surgical cases treated in the hospital.

Woodbury's Water Supply.

On September 25, the Woodbury (N. J.) City Council authorized the water committee to contract with Carson & Murphy for plans and specifications for water works. The works are estimated to cost $63,000.

Personal.

—Dr. W. M. Welch has removed to 821 North Broad street.

—Dr. C. B. Stemen, editor of the Fort Wayne *Journal of Medical Sciences*, has been visiting friends in this city and Lancaster county.

—Dr. and Mrs. T. H. Andrews, who spent the summer at the Grand Hotel, in the Catskills, are at the hotel at Bryn Mawr for a short time before returning to the city.

—Police Surgeon French has a certificate of insanity bearing date of May 14, 1868, which was used to commit a police case to the asylum. It contains only one signature and is not sworn to, showing the loose manner in which such cases were disposed of at that time.

—September 29th was the fiftieth day of Mrs. Veronica Bullas's (of Syracuse, N. Y.,) fast. She commenced abstaining from food August 10, and nothing but water has since passed her lips. She is now too weak to leave her bed. She began the fast on account of gastric trouble.

—Dr. Henry Leffmann, the well-known chemist and Port Physician, was announced last Sunday to be seriously ill and unable to attend to his duties. Through inquiry at his residence, 1330 Franklin street, it was learned that he is suffering from an attack of malaria, and that there is no cause for alarm.

—"The celebration of the golden wedding of

Dr. and Mrs. Benjamin Colby," says the Boston *Transcript*, "occurred recently at their residence, No. 36 North Avenue, Cambridge. The company, composed mainly of relatives representing four generations, was quite large, and the exercises were of rare interest. The address was by Rev. John Colby, of Fitzwilliam, N. H., followed by poems, recitations, and music."

Items.

—In the *Chicago Med. Jour.* for August, Dr. James H. Etheridge reports the case of a fœtus enclosed in its sister's placenta.

—Small-pox knocks with bony knuckles at our northern door, and present vigilance is the price of future freedom from the pest.

—At a Boston bank, where a package of money from Montreal is daily received, the bills are all soaked in a disinfecting fluid and then dried.

—Cocaine is already being adulterated. Professor Kastenbine, reports the *Medical Herald*, analyzed a preparation sold by a Detroit chemist, and found it to contain two-thirds of boric acid.

—A fire in the office of the editor of the *New England Medical Monthly* destroyed his exchanges, a large quantity of matter ready for the press, and books and manuscripts for the Medical History of Connecticut.

—The Governor of Massachusetts has appointed Dr. Samuel A. Green, formerly City Physician and ex-Mayor of Boston, to the position on the State Board of Health, Lunacy, and Charity, formerly held by Dr. H. P. Walcott.

—Verdi has bequeathed his villa Novo d'Arda, to be transformed into a hospital. He has given 16,000 francs to the poor at Bassto, and, in consequence of the bad harvest, has taken off ten per cent. from the rents of all his tenants.

—Dr. Partington, after reading the wholesale withdrawals from the International Medical Congress, as at present governed, was heard to remark sententiously, that he feared the congress was likely to be merely a sexual one.

—Prince Ludwig Ferdinand, of Bavaria, son-in-law of Queen Isabella of Spain, who obtained the degree of Doctor of Medicine at Munich last year, is, according to the *British Medical Journal*, now practicing at Nymphenberg, Bavaria.

—At the June meeting of the District Medical Society for the county of Hudson, N. J., Dr. S. A. Heller, of Hoboken, exhibited portions of a tapeworm, in all about five feet in length, removed from a nursing infant five months old.

—A forest tree in Georgia was recently cut down at six o'clock in the morning, made into pulp at a factory, and into paper at six o'clock in the evening, and at six o'clock next morning was distributed as a printed newspaper.

—Professor Bartholow says that itching of the skin, from any cause, can be allayed by sponging the patient with—

℞.	Acid. carbol.,	2 ʒ.
	Glycerini,	1½ ʒ.
	Aquæ rosæ, ad,	8 ʒ. M.

Sig.—Lotion.

—At a sitting of the Corporation of Hamburg on July 15, a motion for permitting cremation in the State of Hamburg, introduced by Dr. Grieschen, was carried unanimously. It is believed that the Senate of the State will give consent to this resolution.

—M. Gellette overcomes the odor of iodoform by mixing it with charcoal and sulphate of quinine in the following proportions:

Iodoform,	100 grammes.
Sulphate of quinine,	1 gramme.
Charcoal,	3 grammes.

—Doctor Talmage says that no man can be a Christian if his stomach is out of order. "Religion itself," he says, "will not keep a man cheerful if he has dyspepsia. A cup of coffee and an egg is no kind of equipment for a day's work. I take three good meals, and I eat more on Sunday than on any other day of the week."

—"See here," said an angry citizen to a quack doctor, "that 'wonderful discovery' of yours for preserving the scalp is a fraud."

"Why so?"

"Look at that," he went on, removing his hat; "since using it I have lost all my hair."

"Oh, it doesn't pretend to preserve the hair," replied the doctor, "only the scalp. You've got your scalp left. You mustn't expect too much of medical science."

—The *Medical News*, Madrid, August 4, states that the commission recently sent into the infected districts of Spain reports that in all the villages they were able to visit they found the same clinical characteristics of the disease; that in the towns supplied with water from springs or wells cholera either did not prevail at all, or to a very limited extent, while in the towns supplied with water from streams the disease was very destructive, the water being contaminated by the washing of the clothes of cholera patients.

—At a recent meeting of the Société Anatomique de Paris, M. Maurice showed a specimen of perforation of the intestine, from a patient who had died from typhus ambulatorius. He had been so slightly affected by his illness, that he continued his military service till three days before death, when he over-indulged in eating and drinking, and, feeling pain, went into hospital. M. Maurice suggested that in similar cases of slight fever, provoking so little inconvenience, intestinal perforation should be treated surgically.

—In response to a communication lately made by M. Laborde at the Academy of Sciences on the advantages of the intravenous injection of oxygenated water as a microbicidal agent, M. Regnard observed that oxygenated water is instantaneously decomposed on being put in contact with the fibrinous matter of the blood; the blood becomes immediately frothy, which is precipitated in the right heart, and consequently liable to give rise to fatal embolism. This, M. Regnard stated, may be verified by injecting a few drops of oxygenated water into the jugular vein, when, by transparency, the blood will be seen frothing up like champagne. M. Regnard therefore concludes that intravenous injections of oxygenated water should be condemned in practice.